EXPLORING CONCEPTS OF PROFESSIONALISM IN SURGICAL TRAINING IN THE UNIVERSITY OF NAIROBI

BY

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Declaration

I hereby certify that this proposal is my original work and has not been submitted for any degree in any institution. Where other people's work or my work has been used, this has been properly acknowledged and referenced in accordance with the University of Nairobi's requirement.

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Declaration by supervisors

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Dedication

To God, by whose grace this work is done

To Dr. Lydia Okutoyi who has stood for the four years since this work started

To my children, Roselee Odira, Joseph Okutoyi, Esther Akoth and Paul Mich, who had to do with a father who was busy some of the times.

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ABSTRACT

Background

Medical professionalism defines the relationship between doctors, patients, and society. As a social construct, public oaths affirm public trust and demonstrate a commitment to values beyond a physician's personal interest. Its complex nature makes its conceptualisation and challenges unique across generations and cultures.

Objective

This study sought to explore the concepts of professionalism in surgical training within the Kenyan cultural setting, its challenges, how it has been taught up to now, as well as future methods to enable it to be inculcated more effectively.

Methodology

A sequential mixed methods study was conducted among clinicians, students, and patients at Kenyatta National Hospital in the surgical wards from 1st March 2014 to 31st December 2014. The first phase of the study involved Focus Group Discussions (FGD) of 10–12 persons and individual in-depth interviews with senior faculty members and patients. A grounded theory method was used to collect and analyse the perceptions of participants. These views were then coded using Atlas 5.2 (Scientific Software Development GmbH, Berlin 2002), allowing the development of a questionnaire that provided the survey tool for the second phase of the study. For the questionnaire, response options utilized a 4-point Likert scale with a range from 'strongly agree' to 'strongly disagree'. Factor analysis was used to analyse the responses to the survey. Cronbach's α determined internal reliability.

Results

Sixteen (16) FGDs were held with 204 health care workers and students, as well as 18 in-depth interviews with ten senior faculty members and eight patients. A total of 188 participants filled the questionnaire from the 250 that were distributed to consenting participants. The predominant concept of professionalism held by the both the interviews and survey participants was *respect* which they reported was most commonly taught through apprenticeship, with 75.4% in the survey strongly agreeing. The main challenges reported were a lack of *moral character***.** In addition, both phases suggested further ways to inculcate professionalism effectively through the transformation of character and an enabling environment, with 75% strongly agreeing that transforming mentorship was a more effective way of achieving the objective.

Conclusion and recommendations

"Respect" as a cultural value is an important aspect of professionalism. The challenge is how it should be inculcated and sustained. Current teaching methods may be inadequate, and the study suggests new ways to foster professionalism including transformation of character and an enabling environment.

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Glossary

1. MPDB. : Medical Practitioners and Dentists Board
2. ABIM : American Board of Internal Medicine
3. Ph.D. : Doctor of Philosophy
4. WMA. : World Medical Associations
5. FGDs : Focus Group Discussions
6. FGD M1-9 : Focus Group Discussions with medical students groups 1-9
7. FGD F1-2 : Focus Group Discussions with faculty groups 1-2
8. FGDA1-2 : Focus Group Discussions with auxiliary staff groups 1-2
9. FGD R1-3 : Focus group discussion with residents groups 1-3
10. KIF 1-10 : Key informant interview with senior faculty 1-10
11. KIP 1-8 : Key informant interview with patient 1-8

Operational definition of terms

1. **Profession:** A profession is a body or organization that has knowledge that it applies skillfully for the good of the society. Individuals involved share a commitment, regulate themselves and are dedicated to an ideal(1).
2. **Formal Curriculum**: The written form of the course content (the syllabus) and the activities to support learning the subject, including the methods used in teaching and assessment.
3. **Hidden curriculum**: The influences from institutional cultures and structure from implied rules.
4. **Informal Curriculum**: That which may not be written but is taught through personal interactions.
5. **Medical Education**: Educational training of medical practitioners.
6. **Faculty**: Individual or collective member(s) of the teaching staff of a university.
7. **Grounded Theory**: The term grounded theory was coined in 1967 by Glaser and Strauss. It is derived from data that are gathered and analyzed concurrently. This methodology is in contrast to frameworks that put together a theory from a series of observations or concepts, and then gather data to test the theory. Grounded theory develops theories that are closer to reality(2,3).
8. **Interviews:** Using Patton's definition, an interview consists of:
   "Open-ended questions and probes yield in-depth responses about people's experiences, perceptions, opinions, feelings, and knowledge. Data include verbatim quotations and sufficient content to be interpretable."(4)
9. **Unstructured interviews**: These may begin with defined questions but then can change and evolve to respond to the interviewee's experience. Thus, there is more opportunity for the interviewer to probe around the interviewee's responses.
10. **Coding:** Coding is the term used to describe the conversion of raw data obtained from interview and focus group transcripts or questionnaires into good qualitative or quantitative data by methods of categorization.
11. **Focus Groups:** Focus groups are effectively unstructured interviews where the participants are free to interact with each other. The facilitator must motivate and consider all members of the discussion group equal. He/she encourages everyone to contribute, and in some instances, may adopt an interventionist style(5,6). The data obtained from

interviews and focus groups can be analyzed by coding and have the potential for quantification.

12. **Moral:** a particular system of values and principles of conduct, especially one held by a specified person or society.
13. **Ethics**: The principles of deciding what is right or wrong. In the medical field this is called medical ethics.
14. **Virtue-Based Ethics**: In this project, it is used to mean ethics based on the trust in the "goodness" of the doctor rather than bioethics.
15. **Culture** is used in an intuitive and broad sense to denote the whole social environment into which a human being is born and in which he/she lives.
16. **Fostering** is used synonymously with **instilling**, **inculcating**, and **nurturing**.
17. **Organized medicine** is a term that is used by medical sociologists to describe the organization involved in medical education and other regulatory bodies (both professional and statutory) mainly in North America.
18. A **job** refers to short term work for money while **career** is work with long term goals but still for money**. Occupation** is work done to earn money. A **vocation** is long term work that we find deep satisfaction in, and that makes us feel like we are making a difference in the world.
19. **School** as used in this thesis means medical school unless otherwise specified.
20. **Humanism/humanistic:** This is the accordance of deep respect to humans individually and to humanity collectively, as well as concern for their general welfare and flourishing; while professionalism may be thought to focus on being a member of a profession, humanism focuses more on the individual**.**

CHAPTER 1:
INTRODUCTION
1.1 BACKGROUND

While there have been various attempts at defining professionalism, there is no single definition that fits all. Medical educators initially sought a single definition that would be acceptable to all, but this was later changed to understanding it within its sociocultural context (7). The concept of medical professionalism and its application in the medical setting is not new. Beginning in the late 1960s in the United States of America, two main approaches emerged affecting medical professionalism. In the first, bioethicists placed the main focus on rights and principles, asking the question, "What should I do, and how should it be done?" These principles revolved mainly around autonomy, justice, beneficence, and non-maleficence. The second was a virtue-based approach, with documented codes such as the Hippocratic Oath. In this case, the question asked was "What kind of person should I be to fulfil my professional obligation?" (8).

The bioethicists introduced ideas that changed the original understanding of professionalism from that based on virtues to that based on rights and principles. Virtue-based professionalism has a long history, and is based on professional codes that date back to Codes of Hammurabi and Hippocratic Oath. The oaths are not only a promise to society but are also covenantal in nature, and form the basis of the trust that members of society bestow upon the physician (1). One can therefore consider professionalism to be at the core of relationships in the practice of medicine; it enhances the relationship between patient and doctor in such a way that the commitment to the patient is beyond the doctor's own interest, as is the commitment to organizational obligations which also puts their doctor's colleagues' interests above their own (9).

The conceptualization of professionalism is complex, with several review articles and studies having been written over the years, but none have given an unequivocally clear approach. Therefore, in the 90s, the American Board of Internal Medicine (ABIM) – the credentialing body for internal medicine physicians who practice in the USA – combined the main tenets of professionalism into an organized list. The list initially contained six core ethical behaviours that define professionalism (altruism, accountability, excellence, respect for others, duty and honor-integrity). It has since been changed into three fundamental principles (primacy of patient care, patient autonomy and social justice) and ten commitments (honesty with patients,

confidentiality, professional competency, maintaining trust by managing conflicts of interest, professional responsibility, maintaining appropriate relationship with patients, scientific knowledge, improving quality of care, just distribution of finite resources and improving access to care) .This has now been validated in many different countries (9,10).

However, the components of professionalism include not only the philosophical and moral principles mentioned but the cultural context as well (8,11–15). The concept of professionalism depends on the context and prevailing circumstances that include the health care system the physicians are working in, the tools they use to diagnose and treat, the disease burden and how the health care is financed (16). How professionalism is perceived in itself differs over time, and from one context to the other. Recently, the literature has noted a concept called professional identity formation (17–19), in reference to individual physicians reflecting on what the profession requires of them. The conceptualization and learning of professionalism form a continuum which reflects the learning concepts explained by Argyris and Schon (20). These learning concepts, introduced by behaviorists in the 60s, are categorized into the single-loop, the double-loop and finally, the triple-loop of learning. Regarding the conceptualization of professionalism, the single-loop period of learning is the period when the necessary behaviour understood to be professional is delineated. The double-loop period is when learners think what professionalism is, and why it is necessary. The triple-loop of learning is the period when they reflect on what they are becoming, in what is referred to as "professional identity formation" (21).

To date, the majority of studies in this area have been from Western, Eastern and Middle Eastern cultural contexts, with few from an African culture. Various authors have noted most of the attributes of professionalism to be similar across many cultures (22), but there are also attributes that may vary widely across cultures (8,13–16,23). This is exemplified by Ho *et al*.'s study in Taiwan that demonstrated that the physician's integrity is the dominant attribute in that culture, whereas Al-Eraky *et al.* noted that physician autonomy is the dominant attribute in the Arabian culture, while Cohen noted patient autonomy to be the dominant attribute in the Western world (12,16,23). This variance is often dependent on the dominant philosophy or cultural norms of the society under study. Similarly, previous studies on professionalism have often just focused on the views of one homogenous group, such as students only or consultant specialists only. The concept itself is not useful unless it is used to produce a relevant curriculum, which takes into account the views of clinicians, trainees, and patients with regard

to the present understanding of professionalism within the surgical context. Therefore, introduction of professionalism concepts that are not applicable to the local context and that will consequently not be successfully adopted can be avoided.

Teaching professionalism has traditionally been through role modelling. This model involves a physician exhibiting virtue-based practice in a society where there are shared values (1). The physician would be available to his/her students and would never view their patients as a customer, consumer, or an insured life (1). This traditional model has changed over time due to various societal pressures. The reforms instituted by Flexner in the United States in the 20th century were meant to improve medical education. The Flexner Report introduced proper teaching of the sciences and laboratory work. He proposed a faculty that would be multi-skilled as teacher-researcher-clinician. These reforms resulted in improved medical education (24). However, they resulted in new pressures on the teacher-researcher-clinician, with the demand not only to teach but also research and publish. Being clinicians, they were also meant provide consultation for a given number of patients that would make their work profitable for the hospital(24).

The response of medical educators to the erosion of professionalism due to commercialization and other pressures, mainly in Western-based institutions, has been to introduce a formal curriculum of medical ethics that emphasized rights and principles, with case-based teaching as the main method of instruction. Some institutions have introduced the biopsychosocial model of whole-person teaching, adding new skills to the curriculum requirements and adopting more creative methods of teaching, including problem-based learning (25).

As curriculum development is heavily influenced by culture, so too is the understanding of professionalism, its context and its implementation (26). Developing a program or a curriculum that will foster professionalism within our own context requires that we understand the perceptions of what people understand professionalism to be, the problems and the challenges they deem to be associated with I,t and allow them to propose ways of effectively handling the problem without imposing methods and concepts from different contexts.

In summary, the public perception of doctors' professionalism is poor, and that erodes the trust that has been the hallmark of the healing profession. There is changing perception of what professionalism is. This is based not only on philosophical and cultural ideologies but also the

context including time, culture, values and beliefs. Knowing the conceptualization by itself may not be helpful unless it is used in developing a contextualized curriculum. To do this will require looking at the way professionalism has been taught. The teaching of professionalism has also changed with time from traditional role modelling. In order to develop a relevant curriculum and teach effectively, we need to understand how to conceptualize professionalism in our own context.

I studied in the University of Nairobi for both undergraduate degree and master's degree in surgery. Having been a lecturer at the department of surgery for three years preceding the study, and with interest in medical education (27,28), I observed the issues of professionalism around the country among my colleagues, developing interest in professionalism.

My assumptions were that each participant would be truthful in the verbalization of their conceptualization because I believe that though phenomenon is constructed within the context of a study, people differ in the way they understand experiences and that these experiences can only be understood within their context. Understanding human behaviour emerges slowly and in non-linear manner.

1.2 PROBLEM STATEMENT

The complexity in the definition of professionalism has led many medical educators to reassess the meaning of professionalism in order to be socio-culturally meaningful(7). Over the last three decades, there has emerged a large body of literature focusing on definition and seeking consensus on what medical professionalism is. However, no single definition has been found(21,29). This has led to the definition that is context specific and that pays attention to sociocultural sensitivity(29). While the Western literature has defined professionalism in various ways – beginning with ABIM in 1980s, to the Professionalism Project Charter in 2002 – the various elements that define professionalism were defined, important among which is the patient autonomy in the Western literature(21,29). Ho *et al.* (12), Al-Eraky (23), Pan *et al.* (30) and Nishigori *et al.* (31) have challenged these views as not being dominant in every culture, and their studies indicate that professionalism is perceived differently in different cultures.
There has never been a study in our context to define our cultural biases and the aspects of medical professionalism as defined by the initial studies in the West that are predominant in our culture.

Lu has postulated that individuals may at times not fit into the main stream tendencies of cultural behaviour and may lead to confrontation with the culture(32). This may explain the challenges seen with professionalism, or it may stem from the problem with conceptualization of professionalism.

There is a perception that unprofessional behaviour has increased among doctors, especially those working in surgical specialties (33,34). Papadakis *et al.* noted that a lot of litigation is often due to issues regarding unprofessional behaviour rather than issues to do with technical ability (35). Professionalism in the practice of medicine has become a subject of great concern not only to the public but also to those who practise and teach it (1). In the Kenyan context, various newspaper articles have highlighted cases that demonstrate a lack of professionalism. A recent article in the *Standard Newspaper,* a mainstream daily in Kenya, alleged that a doctor left a patient on the operating room table with an unsutured surgical wound and went to the pub to drink alcohol(34). The *Daily Nation,* the paper with the largest circulation in Kenya, recounted another account whereby a doctor was paid by a Member of Parliament to perform a HIV test on a young woman against her will before the Member of Parliament assaulted her (33). Such stories, although not substantiated, suggest a striking lack of professional behaviour

amongst medical practitioners. Such unethical behaviour damages the patients' and public's trust in physicians, and eventually in medical services as a whole.

In the past, physicians were highly respected members of the community and were viewed as valued professional healers. Although their healing role continues, there are pressures on their professionalism caused by changes in society. These changes have had an impact on the way the doctor operates, as well as the societal views on the role of the physician. The changes manifest in various ways: First, technological advances have changed patient-physician contact. Secondly, demographic transitions have led to the questioning of traditions and authority. Third, population increases have affected the doctor-patient ratio thus reducing the allotted time for each patient. Fourth, the commercialisation of medical care has reduced its accessibility due to its cost.

Additionally, there is an increased focus by doctors and corporate bodies on profit from patient care worldwide, not only in surgical practice but in the practice of medicine as a whole (36). Modern health care systems pose a myriad of challenges to the traditional methods of teaching professionalism in medicine. These challenges include the corporate nature of health care among others. These pressures diminish the autonomy of the physician to make decisions that are solely based on the good of their patients, hence there is more pressure on how professionalism is practised. There have been suggestions that there should be a formal curriculum for doctors to increase their awareness of the importance of professionalism and for the cognitive learning of professionalism (37). In the surgical field where invasive interventions are a daily part of practice and often carry a greater risk to the patient, it could be argued that professionalism is an even more important attribute for a surgeon.

The challenges that were brought about by the changing cultural dimensions in the environment resulted in tremendous changes in the way professionalism is conceptualized in the West. Hafferty and Castellani recorded the various types of professionalism that have been brought about by these factors in the West. There is no study that looks at the challenges present in our context or what type of professionalism has resulted from it.

Historically, the formal training methods used in low income countries have usually been modelled on methods employed in the developed world. In Kenya, such methods include both didactic teaching and a form of apprenticeship. The student is expected to regard the consultant

as a role model, follow his or her didactic teaching, and observe them in clinics, ward rounds, and the operating room. The ultimate aim is that the student will not only acquire skills and knowledge but the requisite behaviour as well. This approach neglects the fact that culture influences most curricula, which are context-based and change with time. In many Western countries, they have responded to these shifts in context and culture by moving from traditional teaching methods to problem based learning, and more recently team based learning.

At the University of Nairobi there is no known formal curriculum for teaching professionalism during the undergraduate programme or the post-graduate surgery residency programme. The law and ethics unit taught in the second year of the undergraduate medical program is the only formal teaching of professionalism. However, the faculty who teach this course are not clinicians and therefore have no opportunity to model what they teach. The latest revision of the undergraduate curriculum has similar arrangements. It remains a course mainly based on concepts of law and ethics and has minimal input from physicians, at the most once a year. However, scientific literature authors such as Siegler strongly suggest that teaching medical ethics should be clinical and case-scenario-based, and be simple and integrated. Its instruction should use clinicians as instructors and be an ongoing part of the entire medical school curriculum, especially in the clinical years, rather than being a one year course (38).

Given that medical professionalism is a social construct, its instruction should be a reflection of the underpinning social contract that includes predominant cultural concept of professionalism(39,40). Traditionally, there was no explicit curriculum to teach professionalism. Role modelling was the way professionalism was learnt. Even though role modelling was often a successful approach to promoting professionalism in medical education, there is an increasing recognition of its inadequacy. These inadequacies are brought about as there are fewer shared values among the individuals in the educational community (17). This has been caused by the diverse and varied cultural values which make role modelling less effective. There has been varied means of teaching professionalism that has been introduced in medical education that includes problem-based learning, reflective small groups and biopsychosocial means. No one study has been done to look at how medical professionalism is being taught or has been taught in our context.

In order to develop a culture of professionalism within the medical faculty, there is a need to begin by investigating the present knowledge and attitudes about professionalism and the

challenges faced when teaching professionalism as perceived by the faculty. This method of inquiry should also assist in increasing the ownership of the process as well as making it more relevant to the local context. We need to begin by looking at the gap, which in this case is the need for a culturally sensitive conceptualization of medical professionalism, how it has been taught at medical school, the challenges of teaching and practicing and how that has shaped the conceptualization, as well as how these challenges can be overcome to enable it be effectively instilled.

The research sets to answer the following research questions:

1. What are the major frameworks of professionalism within a developing country context as seen in the University of Nairobi's academic community?
2. What are clients' perspectives on the practice of professionalism?
3. What are the main challenges to the teaching and practice of professionalism at the University of Nairobi?
4. How can the challenges to the teaching and practice of professionalism at the University of Nairobi be overcome?"

The answers would then be used to develop a relevant, transformative curriculum. They would also help us better understand the challenges we face and, hence, develop programs to address them.

Therefore, this study aimed at exploring the concepts of professionalism that are prevalent in the Surgical Teaching Department at Kenyatta National Teaching and Referral Hospital, the challenges of teaching and exhibiting it, how it has been taught and how it can be taught more effectively.

1.3 OBJECTIVES OF THE STUDY

1.3.1 The main objective

To explore concepts of professionalism in surgical training in the developing world from a Kenyan perspective.

1.3.2 Specific objectives

1. To describe the framework of professionalism from the viewpoint of the community involved in surgical training at the University of Nairobi.
2. To describe how professionalism has been taught and to note any changes in the methods of teaching over time if any.
3. To explore the challenges to teaching and exhibiting professionalism in surgical practice as viewed by the academic community of the University of Nairobi and based on evidence from the Medical Practitioners and Dentists Board (MPDB).
4. To describe how professionalism could be inculcated more effectively in Kenya.

These objectives are thus aligned to answer the research questions as follows:

1. What are the major frameworks of professionalism within a developing country context as seen in the University of Nairobi's academic community? This will be answered by specific objective number 1, which is to describe the framework of professionalism from the viewpoint of the community involved in surgical training at the University of Nairobi.
2. What are clients' perspectives on the practice of professionalism?
   This will be answered by specific objective number 1 as above.
3. What are the main challenges to the teaching and practice of professionalism at University of Nairobi? This will be answered aby specific objectives number 2 and 3, which aim to describe how professionalism has been taught and to note any changes in the methods of teaching over time if any, and to explore the challenges to teaching and exhibiting professionalism in surgical practice as viewed by the academic community of the University of Nairobi and based on evidence from the Medical Practitioners and Dentists Board (MPDB)
4. How can the challenges to the teaching and practice of professionalism at the University of Nairobi be overcome?
   This will be answered by specific objective number 4, which is to describe how professionalism could be inculcated more effectively in Kenya.

1.4 STUDY JUSTIFICATION AND SIGNIFICANCE

There has been an increased interest amongst medical educators in professionalism, its frameworks, and how it is taught in all its complexity. This complexity is brought about by many factors that include but are not limited to its embeddedness in the culture of a community, and its basis in behaviour or virtue.

Western, Arabian and Eastern cultural frameworks have already been described many times in past reviews and studies. However, in the African context in general and the University of Nairobi in particular, the frameworks of professionalism that are sociocultural sensitive are yet to be defined.

Therefore, this study aimed to contribute to a definition of a framework of professionalism in the medical profession within a developing African country through an exploratory sequential mixed method. The purpose of the study design was to explore the perception of the participants and develop a tool for a survey whose results could be generalized. The study aimed to help define the cultural concept of professionalism in the context of Kenya.

The study results may help medical educators to understand the framework of medical professionalism within their cultural environment, which will enable them to develop relevant curricula and assessment tools for teaching medical professionalism. Currently, there are no formal curricula at the undergraduate and postgraduate levels of Kenyan surgical education that emphasize professionalism. Introducing a formal curriculum would help sensitize undergraduate and postgraduate students to know what a good doctor should be. This, together with an enhanced mentorship programme, would strengthen the learning of these values.

It will also enable them to determine the challenges facing them, and develop a formal way of teaching and exposing students to the concepts and practise of professionalism for their medical/surgical careers. Importantly, this includes the complexity, cultural nature and perceptions of professionalism. The cultural context of the University of Nairobi is completely different from Western, Arabian and Eastern countries, and this study sets forth a context-specific approach to medical professionalism, using universal methods that investigate the environment as a unit.

1.6 Conceptual and Theoretical Framework

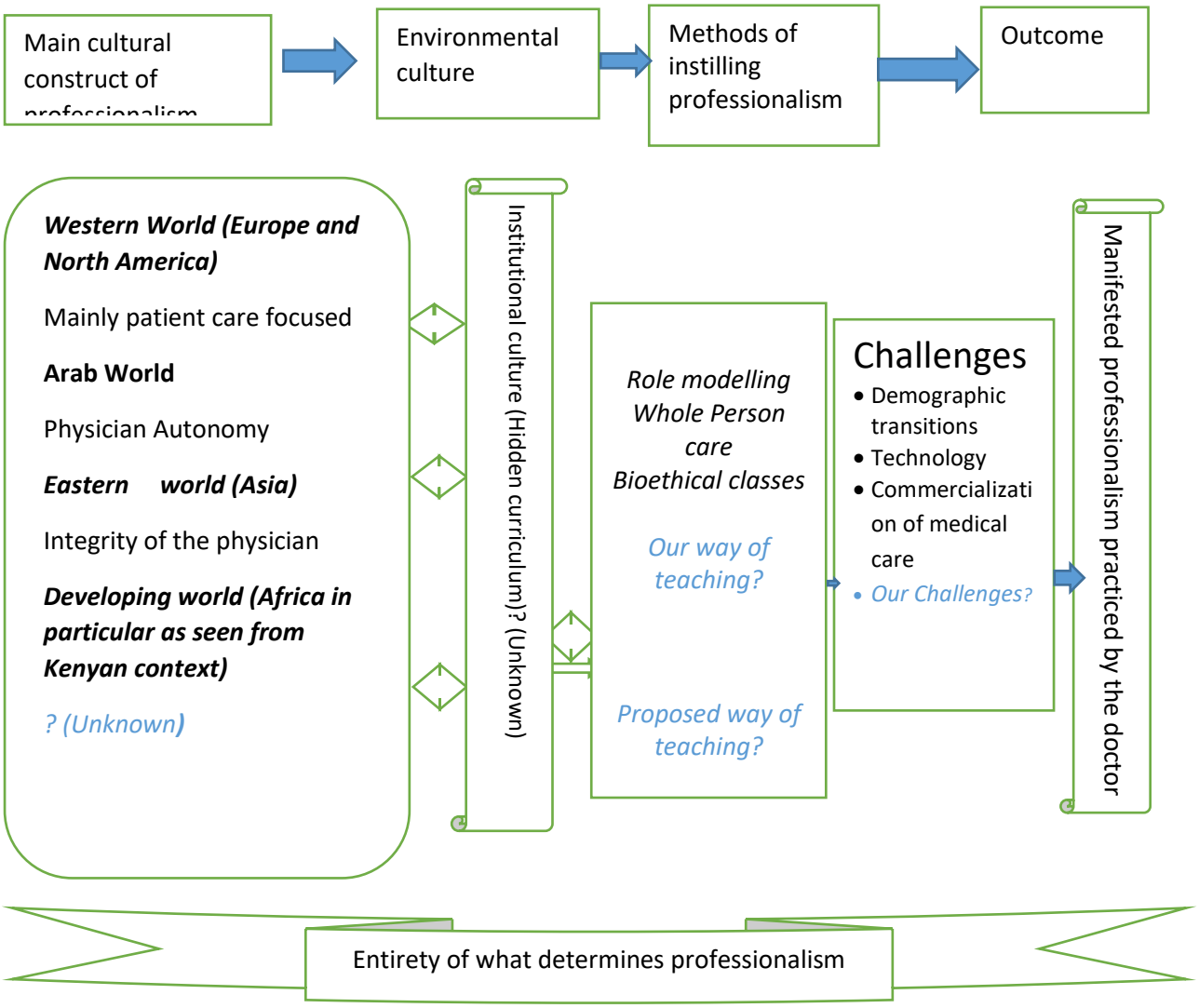

Figure 1: Conceptual Framework

The theoretical principle underpinning this study is that professionalism is a social construct influenced by the cultural context in which it is taught and practised (36). The cultural context in which the practitioner operates and interacts together with the influences within the institutional environment will determine their conceptualization of issues. Bandura has postulated that learning is a social event and Manikutty *et al.* explain how culture influences learning styles (26,41).

What is practised as professionalism is a complex interaction of what is taught, the institutional culture, the challenges that exist within the context and most importantly cultural influence of people's perception of professionalism. People's concepts of professionalism as influenced by culture will interact with all the factors which finally make them what they are.

In this study, the planning of the research was based on the understanding that perception, teaching and possible challenges are all influenced by the cultural and institutional context. These understandings have a number of theories underlying them. The traditional methods of teaching of professionalism have been based on role modelling as illustrated by Lave and Wenger's theory of community of practice, which suggests socialization or enculturation of the individual into the identity of the physician (42,43).

A limitation of teaching professionalism using this method is the incongruences between the lifestyle of those who teach and the principles which they teach. The behaviour they role model is often referred to as a hidden curriculum(42,43). Furthermore, Lave and Wenger's theory fit well into the technical skills rather than non-technical skills like professionalism. Mezirow's theory of transformative learning reveals a limitation of this theory. He suggests learners should think critically about the values taught by society (44). Transformative theory challenges students to think from a different perspective by questioning goals, norms, and values through critical thinking and may be helpful in counterbalancing the hidden curriculum which is a weakness of role modelling.

In addition, this research was carried out by looking at the learning environment as the unit of analysis. Activity theory conceptualizes that learning is not just an accumulation of discrete knowledge and skills but it is a transformative process where the students undergo an identity construction as they develop into physicians(45). Activity theory, based on the work of Vygotsky and colleagues, is a framework theory that considers systems beyond individuals hence incorporating culture, environment, personal history and other issues (46,47). It therefore fits into the framework of the methodology we have used to find out the conceptualization of professionalism, how it is learned, its challenges and how it can be inculcated effectively within the surgical community of the University of Nairobi.

Effective teaching of professionalism can take place only when cultural and contextual influences are reflected upon. The theoretical conceptual framework of this study therefore, looks at Lave and Wenger's theory for its description of community of practice which recognises the cultural context of the institution. However, in view of its limitation outlined above, Mezirow's transformative theory will be especially useful considering the need to identify ways in which professionalism can be effectively inculcated. Since the study looks at the learning process as a unit of analysis, where there is a bigger influence of the culture in the

acquisition, challenges and practice of medical professionalism, it will also be useful as a theoretical framework in this study. One of the ways in which reflection can work is by thinking through the challenges from theory of cognitive dissonance(48) to theory of self-perception, where the individual thinks through challenges they face in order to find solutions that are effective (49,50).

In summary of this introductory chapter, I have noted the knowledge gap in the conceptualization of professionalism in our context given the emphasis on attributes of patient autonomy in the West, physician autonomy in the Arabian culture, and physician integrity in the Eastern culture. I have stated that we need not only know the conceptualization, but think through how it could be used. I have also considered the time lag in introducing improvements as to how it is taught and the lack of a proper formal curriculum in our institution. In the next chapter, we will delve in to what other researchers have found, including historical aspects of professionalism.

CHAPTER 2
LITERATURE REVIEW

The main aim of this thesis was to explore the concepts of professionalism in the developing world by looking at the perceptions of what professionalism means, its challenges, how it has been taught and how it can be better inculcated. The literature review was conducted with the following objectives in mind:

1. The nature of professionalism
2. a) The history of the development of the profession of medicine
   b) How perceptions of professionalism have changed over time
   c) The challenges to professionalism that have been noted in literature
3. a) The historical methods of teaching professionalism
   b) Methods of teaching and challenges
      i) Formal curriculum
      ii) Role modelling
   c) Role of assessment in education
   d) The role of culture of the institution in instilling professionalism
4. a) Role of culture in learning approaches
   b) Role of leadership in changing culture
   c) The context of developing countries

2.1.1 The Nature of Professionalism

While it may be important to have a clear definition of what professionalism means, a precise definition may not be achieved in this brief work. It will also be difficult for this study to look at the comprehensive exposition of what and why professionalism is. The majority of the writing on medical professionalism has been done by medical educators and sociologists reporting in articles, websites and books across the world. This section looks at the literature that mainly defines what professionalism means.

The *Oxford English Dictionary* states that a profession is "the occupation which one professes to be skilled in and to follow. (a) A vocation in which a professed knowledge of some department of learning or science is used in its application to the affairs of others, or in the

practice of an art founded upon it. (b) In a wider sense: any calling or occupation by which a person habitually earns his living" (54). These definitions mirror some of the historical reviews of medical education on professionalism. The dictionary thus focusses primarily on the vocational view as the central theme of medical professionalism. This view emphasizes the 'calling" nature of professionalism.

Wear and Kuczweski in their article argue that most of the discourse that has taken place has been among the professional societies, medical educators and accrediting agencies in the Western world without including student and residents (51). It is their argument that the environment and individual, among whom the discourse on professionalism is taking place, are important (51).

A number of definitions that have been attempted are either in terms of attributes or set of attributes that one needs to demonstrate in order to be considered to have professionalism (52). Others have tended to use an overarching principle to define what professionalism is (53). Verkerk *et al.* argues that professionalism could either be seen as *personal* or *behavioural* characteristic (53). The personal view is one that looks at the overarching principle or the character of the individual as whole, while the behavioural view looks at attributes (53). Those who think of the latter opine that the concept should be grounded on what physicians do while others who believe on the overarching themes would argue that breaking it into attributes may make it lose its essence (54).

Those who have attempted to use the personal view include Sharon Kling, who in a review paper explored the origins of "profession," noting that the word was originally used to refer to those who made religious vows or made their vows publicly (55). A profession was akin to a calling. She also noted that, in the latter form, it meant a kind of expertise from which one could earn a living. In the review, she further pointed out that there were two ways to view professions. According to the first one, within a particular social context, members of a profession were an organized group of people with expertise, who adhered to particular standards of learning and practice, were dedicated to public service and regulated themselves. The second view held that those in a profession ascribed to higher values such as putting the interest of the patient above that of the profession.

Historically, distinguished physicians in ancient Hindu, Confucian or Hippocratic schools, and even relatively modern ones like Thomas Percival, Francis Peabody and William Osler, practiced virtue-based ethics (58). The virtues included compassion, truthfulness, courage, intellectual honesty, service above personal interest, fidelity and trust.

In his definition of 'profession', Fox focuses on three attributes. Firstly, an organizational body with specific skills. The second is knowledge and reasoning that must be acquired before one is admitted into the profession. The last attribute is independence at work with self-regulation, which is both formal and informal in nature; and a value component of service, commitment and calling. The service should be directed towards meeting the needs of the individual and society over and above those of the expert or of the organization itself (56). However, professionalism is defined by both Fox and Kling as a means by which individual experts fulfil the contract of the profession to society (56).

In their review article, Arnold *et al*. define medical professionalism as behaviour that defines the relationship of a physician to individual patients and society (57). It, therefore, serves as the infrastructure for the trust that is necessary to the patient-physician relationship.

Cruess *et al*. attempts at definition have similar ideas of mastery of knowledge and skills used for the good of the society; commitment to service of others above self-interest, which in turn leads the society to grant the right to autonomy (55). The organization maintains that right through self-regulation (55). These conceptualizations are difficult even for those who have tried to put them in one overarching theme. Rabow *et al.* focused their discourse on the formation of individual character that integrates maturation with clinical competency (56). A systematic review by Birden *et al*. to define what professionalism is found a number of studies that looked at attributes and others which used the personal view, and concluded that there is no one overarching definition that is agreed upon because of the changing nature of the organizational and social context within which medicine operates (57).

In 2002, a charter on medical professionalism was produced through the Medical Professionalism Project, a joint effort of the American Board of Internal Medicine (ABIM) Foundation, the American College of Physicians, the American Society of Internal Medicine Foundation, and the European Federation of Internal Medicine. The charter has three guiding principles in so far as medical professionalism is concerned: the primacy of patient care, patient

autonomy, and social justice. The ten responsibilities of the physician in this charter include: commitment to professional competence, honesty with patients, patient confidentiality, maintaining the right relationships with patients, improving quality of care, just distribution of finite resources, improving access to care, maintaining trust by managing conflicts of interest, scientific knowledge, and professional responsibility (9). This charter has been endorsed by over 130 medical organizations worldwide and has been translated into 12 languages. Its main purpose was to build a shared understanding of professionalism and actively advance the tenets of professionalism in practice (9).

However, in critiquing the charter, some authors have raised three issues. Firstly, it is based on deontological (duty or obligation/rule) philosophical principles rather than the virtue-based (character, what one is) principles (58,59). The only virtue based issue is found in its first principle of primacy of patient welfare that implies altruism. Secondly, the charter is written in the third person – "the physician must" – which implies distrust rather than trust, in contrast to the oaths that are written in the first person. The third critique is based on Bryan' s basic professionalism versus higher professionalism (60). This observes that the charter addresses itself to the basics of professionalism (timely and competent service, occupational nature of work, well defined purpose, and the ethical framework is that of rights and duty-based) rather than higher professionalism (exceptional service that transcends the provider's self-interest, the nature of work is that of calling, the purpose is often poorly defined and open ended, and the ethical framework is ethical-based) (61).

Martimianakis *et al*. identified three ways in which professionalism has been viewed; as a list of traits and behaviours, then as a role played in the society and also as a social construction (62). They posit that although traits give a means of measuring professionalism, they demonstrate no causal relationship among themselves, and there is no explanation on how professionalism traits are achieved (62). Role play however draws away from individual to the group hence the need for self-regulation as a group (62). Parson, considered the father of profession, said that professions are groups that are identified by 4 roles; being affectively neutral experts, operating on universal standards of science, committed to objective research and not some political obligations, and dedication to the well-being of the society rather than self (63).

The term humanism has been at times used as an alternative to professionalism but some authors do see a difference. Some define it as the recognition of human values in the utility of science to meet human needs (64). Authors such as Goldberg argue that humanism is at the core of human character whereas professionalism is culturally determined (65). Similarly, Cohen sees humanism as a set of convictions and beliefs including other character traits whereas professionalism is a set of behaviours , implying that humanism motivates professionalism (66). Just as Rabow thought of formation of professionalism as a concept about maturation in character and clinical competency, Huddle and Pellegrino think of professionalism as morality in medicine (56,67,68). Hilton and Slotnick would want to see professionalism not as a character or a trait but an acquired state with a set of behaviours to be achieved (69).

In the doctor-patient relationship, Plato described two types of doctors. In the first one, the doctor would treat his patient empirically for money without listening. In the second one, the doctor would listen, would not treat his patient until he had earned his trust, and would only then persuade the patient to comply (58). The former doctor would be self-serving while the later would be considered a physician who is working within the bounds of professionalism.
The goal of surgical education for the surgical residents and the undergraduates in any country is to equip them with the knowledge and skills to make safe and timely emergency and elective surgical decisions. These decisions are made with the knowledge and technical competency of the resident, as well as values and attitudes that put the patients' interests above the physician's. It is therefore important for medical practitioners in training to pay attention to the large body of theoretical knowledge. However, the ultimate test will not involve what they know, but what they do and how they do it. The purpose of surgical education is, therefore, not only to impart skills and transmit knowledge but also to inculcate the values of the profession in an appropriately balanced and integrated manner (70,71).

Medical schools world over mostly teach objective sciences (72). Theoretically, scientific knowledge as taught in medical schools is formulated in context-free and value-neutral terms and is seen as the primary basis for medical knowledge and reasoning. One might say that since this knowledge is grounded in the basic sciences, medical schools would be value-neutral places with no distinct moral orientation (24). However, physicians should not view scientific knowledge in value-neutral terms, because at its beginning, it was organised on humanistic and social terms. The way it was taught intended it to be practiced by those who serve patient's

interests with compassion. The basic sciences are, therefore, meant to facilitate the understanding of the human body's functioning so that the knowledge can be used to heal maladies in social and humanistic contexts with values such as integrity and honesty above the physician's personal interests (24).

These values that doctors should hold are derived from the public oath taken at graduation. The oath marks the transition from a student to a professional. It is not the medical degree that professes the way the newly acquired competencies are to be employed, but the oath. Without the oath, doctors are just skilled workers, as was suggested by Pellegrino in his 2002 review of professionalism (1). The oath is therefore central to making the doctor at this transition point committed to the values of the practice of medicine. The oath is a public declaration of the physician's principles of conduct. It was written in the first person, and that also signifies a personal commitment to the trust of the public. The relationship between the society and the individual doctor was thus based on the strength of commitment to that trust.

The oath has been modified to fit different contexts. Though its essence has been maintained, some portions may be omitted, as is evident in the differences between the original version and its later modifications mentioned above. Though many elements of the Hippocratic Oath remain the same, one major difference that has occurred over time is the loss of the emphasis made on transcendence by the original oath (Appendix 8 compare to Appendix 9). The University of Nairobi uses the World Medical Association's (WMA's) Code of Ethics, which came into existence after World War II (73).

The WMA's code of ethics resulted from the horrific fact that doctors in one of the nations in Europe not only did not protest against the racist killings orchestrated by the Nazis but also co-operated with them. Psychiatrists designed the first gas chambers, and the concentration camps maintained the fiction of "medical" selection for the gas chambers by putting physicians in charge of the selection process. The Nazis merely extended the logic of the eugenics that was part and parcel of the beliefs of the profession of medicine at that time.

Viewed from the behavioural aspect, one of the major attributes that comes out and that was a major drive of bioethicists in the Western world was ethical behaviour with its attendant philosophical underpinnings. The ethicists who aimed to help decision making during times of dilemma introduced ethical theories. These theories were based on: duty, rules, deontology,

results, consequentialism including utilitarianism, case based ethics-casuistry, and communitarianism as well the principlism of Beauchamp and Childress (74). As was alluded to earlier, in the 1960's there appeared to be the rise of bioethicists whose underlying principle in the conception of professionalism was right duty.

It should be noted that the ethical principles discussed within these theories had very little to do with the contract between the physician and the society, or the relationship between the physician and the patient in general, but mainly involved decision-making in clinical dilemmas. Therefore, ethics could be considered a part of the subject of this thesis, as professionalism which involves the doctor-patient relationship and the doctor-doctor relationship goes beyond the need for a framework for decision making in clinical dilemmas. While the context for these relationships could include some of the ethical theories, they need to be complemented by that which emphasises the character of the individual as was envisaged in the oath and by the early physicians (60).

A critical review of the literature from the Western world on the concept of professionalism from the behavioural view seems to suggest that the points summarized in the Physicians Charter are the main views (9,58,75), the fundamental concept being that of patient primacy and their autonomy (16). However, humanistic attributes are clearly important as well but not first and foremost. The personal view point suggests a moral foundation as being the basis of behaviour (1,67,68). Wagner *et al.* in their qualitative study identified skills and knowledge, patient relationships and character as the primary themes defining professionalism, with a number of secondary and minor themes (76). Jha, on the other hand, while undertaking a qualitative study, identified conceptual and behavioural views which he then analysed into seven themes: compliance to values, patient access, doctor–patient relationship, demeanour, professional management, personal awareness and motivation (77).

Asian literature is not as extensive as the Western, but it suggests within it a difference in the conceptualization of professionalism from the Western literature in the areas of patient autonomy, service and justice (78). Chandratilake and colleagues, while surveying concepts of professionalism across cultures using attributes, noted differences and similarities; and attributed the differences to cultural identity (7). Ho *et al.* in a study among the Taiwanese medical community also noticed the differences, with emphasis on the integrity of the doctor as a major requirement in the Asian community (12). Their research was based on group

consensus among students, nurses and experts (12) . Cruess and colleague also noted differences in how a group of medical educators who had gathered in North America from across different cultures conceptualized professionalism. The Arab peninsula has very few studies, but one by Al-Eraky and Chandratilake from the behavioural view point indicated that the concept is that while they mention many other attributes as part of professionalism, they came to consensus that physician autonomy was emphasized most; probably because of the paternalistic culture so prevalent in the region (23,79,80).

There are three papers from Sub-Saharan Africa published in open access literature on professionalism. One is by Baingana *et al*. from Uganda, the others by Du Preez *et al.* and Van Rooyen from South Africa (81–83). Baingana *et al.* had a section on the concept where they listed code of conduct, professionalism, competence, and communication with moral foundation as the basis (82). However, their focus was not how it was conceptualized but on how it was learned (82). They demonstrated that cultural differences led to a difference in attitudes between North Americans and Europeans and their students in Uganda, notably concerning the maintenance of confidentiality given the attitude of communalism in the African context (82). It is not just a lack of resources that makes these differences, but the cultural differences as well (82). Du Preez et al. looked at how professionalism is taught with his list of 'Golden Threads' as the basis of teaching (81). That list included justice and human rights issues, and undefined professional attitudes (81). Van Rooyen looked at the views of students in South Africa, gave them the ABIM attributes and asked them whether they agreed with those views (83). A majority of the students agreed, with only 15.64% of them disagreeing (83). While the majority agreed that they were desirable, they felt they may not be totally applicable due to lack of resources (83). The limitation of all these studies is that they only involved students; their focus is not on conceptualization. However, they do bring out that fact that even in Africa the conceptualization of professionalism is different from the Western concepts (83).

Epstein and Hubert's definition of professionalism states, "Professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served." (84) This definition, of course, will fit well with an overall general reflection on a technical occupation that interacts with society such as medicine. It does also

pick up most of the attributes and the major themes of body of knowledge and skills, autonomy, and service to the community with commitment beyond self-interest.

In summary, this literature survey illustrates that medical professionalism is conceptualized either as specific attributes or behaviours that together contribute to professionalism or personal character with an overarching view. There is overlap in some accounts, with the personal view forming the basis of the behaviours. It is also evident that ABIM captures most of the attributes, but that different cultures emphasise particular attributes depending on the cultures in those regions. There is no definition or overall conceptualization of medical professionalism that has been agreed upon universally. Epstein and Herbert's definition comes close to integrating the ABIM and Cruess definitions in capturing most of the common and important issues. However, one needs to note that no single definition has been agreeable to either medical educators or medical sociologists across the cultures despite a number of traits or behaviours being similar.

In the next section, I will look at how the concept of the profession developed within the medical field and how external and internal pressures made it change over time, mostly within the Western world where the discourse has been the longest and has been recorded in accessible literature.

2.1.2 The history of development of the profession in Medicine

This section will address the issue of how medicine became a profession historically even as we look at the conceptualization of profession. This will help us know the thoughts that drive how physicians practice medicine. We will look at this mainly from the Western literature but also have look at some of the issues as far as medicine as a healing ministry in Africa is concerned.

According to sociologists, the recognition of medicine as a profession both in the United States of America and the United Kingdom followed the principles used by craft guilds to exercise their authority (85). The craft guilds controlled their trade by ensuring quality products, and minimized the number of apprentices admitted to the guild (86). Those who were not admitted became journeymen and offered their services at cheaper rates. However, authors such as Sox suggest that the rise of individual business people as well as the growth desired by the US weakened the trades' craft guilds by allowing other players to come in (86).

For its part, medicine was recognized officially in the late mid-19th century, especially in the United States of America; the introduction of medical schools and science into the curriculum of medical education would make doctors the only purveyors of medical science and the practice of medicine(86). They were thus able to have special knowledge, and they organized themselves into the American Medical Association in 1847 to regulate themselves and maintain standards(86). In the United Kingdom, the Royal College of Surgeons arose from the Company of Barbers and Surgeons that was established in Dublin in 1446. It received a charter in 1540 (87), while the College of Physicians was formed in 1518. The barbers and surgeons were separated in 1745 by an act of parliament that gave the surgeons the authority to teach anatomy among other things.

Medicine developed as a dominant profession during the industrialization period, with the key drivers being reorganization and rationalization of work, and involvement of government in the social welfare, including health and growth of capitalism (88). As unskilled labourers formed unions to protect their interest, the elite relied on state legislation to protect their interests (88). Having formed an association in 1847, medicine placed itself in a regulatory environment which protected it from government interference (88).

The term 'profession' is used to describe occupations that include law and preaching and is, therefore, generic for paid occupations which require advanced education. However, in professions that require an oath, it is that spoken oath which defines it: made in a public forum with a public commitment to practise the profession in the best interests of society above that of the individual practitioner (86).

It is Parsons that brought to the fore the idea of service above self-interest as an embodiment of what professional life is (88,89). He posited that the authority of the doctor comes from his technical competency (88). Sociologist like Hafferty think of him as being naïve of the fact that self-interest is what drives the doctor to cultivate ignorance and helplessness in the patient as a technique of social control (88). In discussion of profession in general and medical professionalism in particular, Hamilton argues for Freidson's definition of professionalism as alternative ideology to market-organization that assumes the client is well informed, and the demand will therefore drive the cost. Freidson's professionalism has at its core; acceptance by the society, higher theoretical knowledge and credentials by higher institutions (90).

The Hippocratic Oath was introduced in the 4th century BC by an unknown author. Its main elements included identification with the transcendent, in that the oath-taker swore by the gods. Other elements included teaching medicine to the next generation, making decisions for the betterment of the patient, doing no harm, conforming to moral principles and social norms, accepting limitations and respecting collegiality, not exploiting one's position and keeping confidentiality (73). However, it should be noted that in that era, surgery was regarded as doing "harm" and invasive procedures were not commonplace. In the modern era, the Hippocratic oath is most commonly viewed as either the intention to do no harm and to help cure, or "doing harm" but with the intent to cure. The "doing of harm" with intent to cure illustrates what is known in ethics as the principle of double effects , where although the process of treatment, either surgery or medication has side effects, the action is done not to bring the side effects but to treat, to do good (91).

Furthermore, Hulkower explains that in most writings attributed to Hippocrates, he writes that doctors should take the least damaging approach to treatment, not the method that will give them most fame (92). However, over the years, transcendence, moral principles, social and legal issues have slowly been left out (93). The American Medical Association (AMA) in 1847 introduced an ethical code that addressed the commercialization of medicine, which is absent in the modern-day versions of the oath. Updated versions of this AMA code (2001) contain respect for human dignity; and the physician Charter of 2002 from America Board of Internal Medicine (ABIM) emphasized the patient-centred approach (86).

The General Medical Council (GMC) of United Kingdom defined professional attitudes in 1993 and updated the definition again in 2003 and 2009 (94). In Kenya, the Medical Practitioners and Dentists Board has had a code of conduct since 1987 which emphasizes the structure of the licensing body but also touches on the doctor-patient relationship and abuses one should avoid (95). The UK and the Kenyan guidelines seem to be a set of duties, and not necessarily obligations as professionalism ought to be(96). In other words, a duty is a role one has to fulfil in order to look professional, while an obligation is what one ought to be, a performed function because of who they are.

The development of medicine as a profession has occurred within the various countries following socio-economic issues of the society and their societal expectations (86). Whereas the medical profession earlier on thought they could protect the profession from

commercialization using oaths and codes, it has become difficult with the development of the codes of conduct (86). This development is because of involvement of the third party and ensuing patients' rights, which has been included in the later codes (86).

The view of the African traditional healer is mixed; some view the healers as capricious, other as healers. They continue to offer services that people turn to either because of lack of resources or often because of failed intervention from conventional medicine (97). Some obtain these services first and only turn to conventional services when they have failed (97). The healers have not turned into the profession by the definition of the definition of Parson, in which they gain authority by virtue of taking time to learn knowledge that is scientific in its nature (88). Some of the plants they use have been discovered to be useful agents of managing diseases and in some countries, and they have been licensed to treat, though under a separate cultural jurisdiction (97).

The vulnerability of the sick is something that has long been held by the Africans, whose view of life is the connectivity between the living and the dead, and hence has a lot of respect for the elderly and the dead (98–100). However, no one has distilled cultural features to be distinct to only medicine; though in a study in Uganda, Baingana *et al.* did find that the communal nature of living does interfere with confidentiality as it is described in the Western literature (82).

In summary, the development of the medical profession has been clearly shown to follow the craft guilds, in their way of asserting their authority and power. This was achieved through the introduction of scientific knowledge that was accessed only by the privileged few. Those who accessed the knowledge have since developed codes of conduct over the years that are supposed to help them remain committed to giving service to the society. The codes of conduct have been modified in varied ways that identify with the dominant social contextual issues of the time, with the aim of ensuring commitment to service independent of the professional. Although some of these codes have found their way to developing countries (especially in Africa), the unscientific nature of the African healers' knowledge has not enabled them to be identified as a profession. The African culture seems to influence the way professionalism from the West is practiced.

2.1.3 Changing Views on Professionalism from the initial thoughts to new thoughts

As has already been mentioned, the discourse on medical professionalism has mainly taken place in North America, and hence the changing views will be discussed from that particular part of the world. These views from North America influence world leaders through the medical journals and other sources.

One of the major writers from the sociologistic view on the complexity of medical professionalism is Hafferty, whe has written over four papers on the complexity and the changing views in medical professionalism (14,88,101,102). Using social complexity theory and assemblage, he argues that there are external and internal factors that have forced increasing professional complexities in organized medicine (88). Organized medicine became the dominant one in the profession of medicine as a result of industrialization forces and involvement of government in advancing the general welfare and health of its citizenry (88). Medicine's prestige and power enabled them to gain cultural legitimacy with legal and legislative entitlements (88). This enabled them to evolve as a professional entity, like a trade union protecting professional rather than business interests (88). This dominance reached its peak in 1950's and 1960's when it grew in scientific and technical competencies as well as legitimacy (85,88,101,103). Medicine gained status by convincing the general population, the government and economic elites that they did what is valuable and for the good of the public and required no external regulation (101).

The sociologist posits that in the 1960's, external challenges played the role of what has been called the deprofessionalization of medicine (102,104). These challenges included increasing cost of care, which led to government, corporate purchasers and sellers, consumer groups and other providers come in to take control (88). Internally, there was the complaint that organized medicine was focused on protecting themselves and gaining profit(88). Although there was consistency in the behavioural traits that constituted professionalism, there was a dispersion of the traits into a variety of categories in accordance to their priority (14).

In two of their discourse on professionalism, Hafferty and Castellani demonstrated these categories in the complexities of professionalism(14,101). They argued that professionalism should be dynamic and changing within the different contexts and generations that were found (14,101). In one of the discourses on the concept of profession within the work of Abraham

Flexner, they pointed out that even Flexner examined the evolution of professionalism as being influenced by societal and social forces (14). They considered professionalism to have three dimensions: individual, organizational or institutional and national or systemic (14). In their view, at the individual level, there were seven ways of categorizing professionalism: nostalgic or traditional, academic, activist, lifestyle, entrepreneurial, empirical and unreflective (14). The seven perspectives were categorized based on ten factors (14,101). The ten factors included altruism, autonomy, commercialism, personal morality, interpersonal competence, lifestyle, professional dominance, social justice, social contract, and expertise (14,101). These factors were seen as ways of organizing work that can fit in value (altruism), beliefs (social justice), skills (technical, interpersonal) or ways of protecting the profession from external influences (autonomy or professional dominance) (101). One of the main points of the review was to expand our understanding of professionalism and its many dimensions, and how they had changed over time due to societal and social pressures.

Hafferty and Castellani defined autonomy as working or making decisions independently, and commercialism as the application of business principles to medical practice or turning medical knowledge into a product for sale. The idea of fairness and just distribution of resources in medicine is defined as social justice, while covenant with society was seen as a social contract. Interest of the patient ahead of the physician's interest is altruism. When 'organized' medicine was in control of delivery and payment of health care, it was termed professional dominance. Communicating well is interpersonal competence, and appropriate skills defined as technical competence.

Hafferty defines nostalgic professionalism as that advocated for and defended by the organized medicine representatives, that they see as represented by the first-tier medical journals and various organizations in the position to control medical education. The organized medicine representatives began a movement to improve professionalism in medicine; not a new type, but an attempt to restore the old which was strong on autonomy and dominance with an immense dislike for commercialism. Academic professionalism describes those in teaching – they work within the environment so are concerned with much of the protection, hence autonomy or dominance is not high but altruism is, and commercialism is low.

Empirical professionalism is also academic because it involves research, is supported by the corporate bodies and is at the cutting edge of generating new knowledge, thus autonomy and

technical competence are important. It is pragmatic about commercialism because it generates a lot of grants.

Lifestyle professionalism is thought to be newer. It has resulted from postmodernism and the feminization of medicine; with the need to have medicine as a support for those who want a lifestyle that allows time with family. In this kind of professionalism, the belief is that a workaholic life is bad, with the aim being some balance and even altruism. There should be consideration of one's own interests as a physician before taking care of others.

Activist professionalism involves those whom from time immemorial have worked with the popular media, public health and the community to provide care for the underprivileged, with the major concern being social justice. They take their oath seriously, in the conviction that medicine is not a lifestyle, nor a way to get money, a research institute or an elite society.

Entrepreneurial professionalism is not new. While organized medicine had partially eliminated it at some point, the business community realized that clinical medicine can be a profit centre. The business community see themselves as those who can find solutions to the high cost of medicine by leveraging on business ideals in order for everyone to afford better health care.

Unreflective professionalism is one that is practiced by those who lead their life working and delivering health care without being involved in the discourse on professionalism and at times may not even know the issues being discussed.

Hafferty and Castellani further argued that the context of role modelling has changed as the number of hours worked by physicians has also changed. They also argued that it had been affected by the difficulty of dealing with the conflict of interest and commercialization that had threatened professionalism in medical circles over the years. As a consequence, the concepts of professionalism have changed, becoming more complex. Their main argument was that professionalism was dynamic and context-based, and could not be a one-sided, legalized and static affair(14).

Table 1: **Hafferty and Castellani's depiction of the various forms of professionalism in the Western world adapted from "The seven types of medical professionalism arranged according to their approaches to 10 key aspects of medical work"**

	Nostalgic	Entrepreneurial	Academic	Lifestyle	Empirical	Unreflective	Activist
Most important	Autonomy	Commercialism	Altruism	Autonomy	Autonomy	Autonomy	Social justice
	Altruism	Autonomy	Interpersonal Competence	Lifestyle	Technical Competence	Interpersonal Competence	Social Contract
	Interpersonal Competence	Technical Competence	Technical Competence	Personal morality	Commercialism	Personal Morality	Altruism
	Personal Morality	Professional Dominance	Lifestyle		Professional Dominance	Altruism	Personal Morality
	Professional Competence				Altruism		
	Technical Competence						
Moderately important	Social Contract	Lifestyle	Personal Morality	Commercialism	Social Contract	Technical Competence	Interpersonal Competence
	Social Justice	Personal Morality	Professional Dominance	Interpersonal Competence	Personal Morality	Lifestyle	Technical Competence
			Social Contract	Technical Competence		Professional Dominance	Autonomy
			Autonomy				
Least important	Lifestyle	Interpersonal Competence	Social Justice	Altruism	Social Justice	Commercialism	Lifestyle
	Commercialism	Altruism	Commercialism	Social Contract	Interpersonal Competence	Social Justice	Commercialism
		Social Justice		Social Justice	Lifestyle	Social Contract	Professional Dominance
		Social Contract		Professional Dominance			

The issue is how the organized medical profession deals both with internal issues such as increasing sub-specialisation, and also with the challenges of external adaptation, such as patients' awareness of what doctors should or should not do (101). Patients are also becoming aware of what constitutes a good doctor. This awareness will have a great impact on the nature and sustainability of medical professionalism in the future (14). In other words, the debates over workforce issues such as patient safety, conflict of interest and duty hours, are in essence debates about the full meaning of medical professionalism (103). There should be balance and focus in the discussion, which should, in turn, be contextualized to the region of interest.

In an article reviewing professionalism, Coulehan traces the changes that have taken place in medical education, beginning with the traditional approach that was in place before the 1970s. He observes that there was a change as deontological (the study of the nature of duty and obligations) principles replaced virtue-based practice with focus on patients' rights and shared decision-making (25). The principlism introduced by Beauchamp and Childress (74) mainly focuses on duty and rights, and is therefore based on the deontological ethical framework as opposed to the virtue-based ethics espoused by the traditional oaths. In other words, while the bioethicists introduced rule-based professionalism, original professional ethics were based first and foremost not on following rules but on the behaviour from one who had become a professional. From Bryan's work, the rule-based professionalism is basic while the other is higher professionalism (61).

Pellegrino notes that, even in philosophy, professionalism has been characterized by virtue ethics, which have been heralded as the oldest and most durable form of ethics in the Western and Eastern worlds (1). However, he notes that professionalism has also been subject to numerous theories. For example, there are those in philosophy who do not view professionalism as being limited to virtue ethics. Rather, they view virtues as just one part of many that make up professionalism. Others hold virtues as being essential aspects of ethics, while others hold the view that all ethics is virtue-based (1).

Both Pellegrino and Coulehan note that there has been a growing interest in professionalism among medical educators, professionalism in this case being different from ethics (1,25). This interest has arisen for various reasons. Pellegrino's view is that it is a reaction to the decay in moral values within the medical fraternity (68). He argues that the practice of medicine is a moral enterprise, and that morality is at the centre of the healing relationship (68). He further

argues that morality was at the core of the healing relationship up until the Enlightenment period, when ethics – the branch of philosophy that examines the rightness or wrongness of human actions – was introduced (1,68). He then argues that ethics arises when claims of morality were the subject of critical inquiry at a given time (68). In medical history, these claims were depicted as the picture of a doctor who is a benign, benevolent, all-knowing figure, as was seen in the Hippocratic corpus (1).

This picture of morality as the basis for virtue-based medicine was prevalent for a long time. It has since been fractured in three primary ways. First of all, patients are better educated hence, they want to be involved in decision-making about their health. Second is John Locke's idea of a contract of service between the sick person and the doctor, two autonomous individuals. Third is the commercialization of medical knowledge so that surgical knowledge is held as the proprietary possession of a physician, who can sell it as a baker would sell his or her bread (68). Pellegrino's article raises the historical issues that are relevant to our view of morality and professionalism in the field of medicine, and the issues that led to the change from virtue-based to ethic based professionalism (68). One of the historical facts raised is that the practice of medicine was long held to be about love for humanity and mercy to a vulnerable person and society.

Pellegrino states that the words, 'love to humanity and mercy to a vulnerable person and society' are attributable to Scribonius Largus, who was Emperor Claudius' physician (68). They originate from the Greek words *Humanitas* and *Misericordia* (68). He holds that in the healing relationship, there is some inequality (68). This has to do with the patient's vulnerability and the need for a physician with the virtues of love and mercy (68). The physician then acts for the good of the patient and society, not for his own good (68). Pellegrino argues that the vulnerability of the patient due to illness puts the responsibility on the doctor (68). He however argues that in decision-making, the two are moral agents whose decision will depend on their individual value systems (68). Thus, if a Jehovah's Witness values non-transfusion over life, then this wish should be respected. However, the physician's values should be equally respected in the process (105).

The changes in medical professionalism in the light of its increasing complexity have been described by sociologists and bioethicists as well as medical educators (42,68,101). They offer critical and telling insights about the interface between society and the profession. In the earlier

era, society was favourable to the concept of professionalism, and it was felt that the service orientation of the professionals would benefit society. However, in the mid-1960s and 1970s, the tone changed, and professionalism as a concept was viewed as being flawed, partly because of the inherent conflict between service orientation and self-interest (88,101). The medical profession was criticized for its emphasis on remuneration, its failure to self-regulate adequately, its apparent inability to address problems that were felt to be important by society, and the fact that it often put its own welfare above those of the society and individual patients (104). This literature reflects public opinion at the time and since then has had an influence on the public's perception of the medical profession (37). While change has taken root in the West, it is slow in our East African context. The changes which brought with them the introduction of rights and duties of the doctors can be seen in the principlism of Beauchamp and Childress principles of biomedical ethics (74) which is mainly deontological in its framework. In the deontological framework, the American Board of Internal Medicine Charter espouses similar ideas with a mixture of patient primacy that can be said to be virtue based as explained above.

Moreover, in 2002, Ginsberg *et al*. found that there were about 48 areas that students noted to be gaps and challenges in their understanding of professionalism(106). The main point in their study was that the perception of professionalism by study participants was incongruent with the normative traditional abstractions(106). The differences were mainly noted to be in communicative violation, role resistance, the objectification of patients, and accountability(106). This was an indication that it was necessary to contextualize professionalism, and that it was clear that perception could differ from time to time and from place to place (106). The methodology employed in the study enabled them to underline the attitudes and values within that specific context.

Bosk's work in Pacific University Hospital in the 1970's further highlights the fact that professionalism could be complex, and that even within medicine, various disciplines could differ in the way they conceptualize professionalism as shown by the way they practise (107). Bosk was a medical sociologist who used ethnographic methods to study how error was perceived and dealt with within the surgical community of Pacific University (107). Although he did not study professionalism, his work demonstrates that surgery as a discipline which uses invasive procedures to cure, requires more commitment and responsibility to patients (107). In order to cure, the surgeon invades the body with his or her tools, which is not the case with

those who give medication only (107). Other studies have demonstrated that professionalism has a role in the safety of surgery (108).

In this section, I have looked at the sociologist's perspective of the changing views on professionalism from the time it was dominant to the time when medicine is much like any other profession. It appears that the traditional concept of professionalism from the beginning of medicine to the time of its dominance in the West were those of a moral enterprise with emphasis on altruism and autonomy. These views or abstractions have however changed to where there is no agreement within medicine itself on the definition of what professionalism is. There are complex systems and subsystems between individuals and institution and even nationalities. These changes came as a result of the challenges from within and without organized medicine.

This discussion, however, seemed to be taking place within one cultural milieu, with no one knowing whether similar categories could be present in other cultures, or if changes from the professional dominance to other categories have taken place in other cultures. In other cultural settings, the discourse has scanty literature on medical professionalism and medical education. The discourse on medical professionalism in Arabian and Asian cultures has just begun, with a handful of literature on the same.

In the next section, I will focus on the challenges of professionalism and how they have been perceived by the sociologists, bioethicists and medical educators.

2.2 The Challenges of Instilling and Practising Professionalism

The 'good doctor' view has been met with some difficulties over the years. These have led to the above-noted changes in how society and professionals view what professionalism ought to be. According Hafferty, in reforming medical education so that it would adopt the basic sciences as a foundation for clinical practice, Flexner's ideal for a clinical teaching member of staff was a teacher-researcher (14). He had two types of physicians in mind; one who would serve as a teacher-investigator and another who would serve as a practicing clinician (109,110). The former would be distinct from the latter in that he would not have to generate income from outside by seeing private patients (14,109,110). Therefore, the altruistic role would play out in his daily work (14). However, the role of the educator-researcher physician has been modified

by an emphasis on research as opposed to teaching (14). The modification has been brought about by the promotion of teachers based on the number of papers they write, without consideration for their teaching input (14). Furthermore, clinical practice in itself is demanding. Hence, the amount of research in this area is restricted. Promotion and performance appraisal are dependent on research, which also brings in little pay. This leads to the low motivation for physicians to become teachers (24).

On the other hand, the clinician is under pressure to increase revenue collection by providing care to paying patients. The result is that both the teacher and the clinician have less time for teaching. The commercialization of medical care also leaves clinicians with less time to teach (111,112). Commercialization occurs because of the increased cost of living, societal expectations, and pressures from the corporate nature of the medical business. These forces of commercialization tend to put the interests of the doctor and of the business above those of the patient. Hence, they threaten the professionalism that lies at the heart of the practice of medicine. Flexner viewed them as external forces that would corrupt the core of professionalism (14,109,110). The commercialization of medicine is not only the problem of the West, but is present with Kenyan doctors given the number of private hospitals run for profit, as well as the presence of Hospital Maintenance Organizations that manage insurance pay for patient. It is part of the pressures within our context on professionalism.

Although surgeons or physicians are not free from selfish aims, they do hold the ideal of being devoted to larger and nobler ends rather than merely the satisfaction of selfish ambition (14). The reforms brought about by Flexner were based on the examination of extensive data from many countries and circles. Abraham Flexner was commissioned by the Carnegie Foundation to research on the status of medical education following a public outcry in the US in 1908 about the quality of teaching in medical schools and about the quality of their graduates. He visited and received reports of all the schools, and visited Europe to compare the teaching of medical students done there. The report was eventually compiled in 1910, raising concerns about commercialization of medical education and poor standards of teaching, with resultant overproduction of ill-trained doctors. As a result, some schools were closed, and his reforms raised the standards in medical education. Hence, he was respected and remains a highly esteemed authority in the field of medical education (109).

The forces of commercialization continue to affect medical education even in the 21st century as well. Surgery, being a practical field, suffers the most. The training of doctors is sometimes seen as a way to earn a living and not as a calling to help alleviate human suffering (113). A doctor's nobility was based on the fact that he put the interests of others before his own, but in the current context, it is based on his income and lifestyle. These circumstances are not unique to the current context. Even in the earlier days of medicine, these influences were present. Hence the lamentation by Richard Steele (1672-1729) that 'a doctor who can help a poor man but will not do so without a fee, has less sense of humanity than a poor ruffian who robs a rich man to supply his necessities. It is something monstrous to consider a man of liberal education tearing the bowels of a low-income family by taking for a visit – as fee – what would keep them for a week', quoted in Professionalism in Medicine by Sethuraman (105). The Prayer of Maimonides states the exact opposite, where they see the need to be kind and demonstrate humanity in caring for those who are suffering (114).

When learning takes place in an environment where the trainer is extremely busy because he has to attend to his clients much of the time, the students learn that health care as a business is more important than health care as a calling. In the current context of most developing countries, students are taught by trainers who spend limited time with patients in public hospitals due to the low pay given by the University and the government. This point only drives home the difficulty in teaching professionalism by role modelling (24).

Hafferty has referred to the commercialization of the medical profession as "the elephant in the room of medical education" in a review of professionalism. Within the review, he recounts how medical care has been turned into a business by entrepreneurs, and how investors in the pharmaceutical industry use doctors by paying them to market their products. The involvement of these industries erodes the autonomy of the doctors and of their decisions, which should not be based on their income but on scientific evidence (115). He advocates for peer review and responsibilities at the societal level. In other words, he calls for the community of physicians to take the responsibility to protect, nurture and expand the role of the physician, to maintain the values and ideals of professionalism against the prevailing social forces of the free market and bureaucracy (115).

The role played in reduction the dominance of professionals by bodies such as the government, corporate purchasers of health such as managed care companies, as well as corporate sellers

including pharmaceuticals companies, is enormous (88). While the initial goal was to reduce cost of health care to the individual, they have not managed to do so and have instead reduced the autonomy and dominance of doctors. Doctors who were averse to Health Maintenance Organizations (HMO) now fight to be hired by them (88). The dominance of organized medicine has been reduced because of the many players in the field of medicine with interest and influence in policy formulation (88).

There are others with a legitimate interest in the formulation of policy and the regulation of medical care, such as nurses, clinical officers and other professions allied to medicine as well as administrators, who together have eroded the domination of the medical practitioner (88). The erosion has been not only in the area of policy and regulation of medical care but also in technical authority as well. The technical authority is in the sense that only doctors knew what and how to manage diseases, but the entry of alternative professions results in competition (88). In the latter case, the doctors for a long time were thought to be the only people who knew how to manage themselves, but the entry of health administrators also meant there were people other than health care professionals who would not have the interests of doctors but managerial concerns at heart (88). This affected professionalism in the sense that it is not only the doctors who know and handle the patients as the final person, but many other professionals work as alternative to the doctor.

The personal character of the individual doctor and sometimes the corporate disposition of organized medicine have challenged each other in the discourse. This has been mentioned above as part of the reason why in the 1960's the public began to mistrust doctors because they thought they were self-protecting rather than serving the interest of the public. It is because of this mistrust between the public and the doctors that the movement to improve professionalism began (116). Corruption has long been in medicine and is prevalent in many countries (117). This has made role modelling inadequate by itself as a means of instilling professionalism (17,37). One of the issues that could either be generational or caused by globalization is lack of shared values, hence making role modelling and practices to be interpreted differently, and also a new generation who question ideas and do not take them for granted (44,118).

For surgeons, in particular, technological innovations have meant the improvement of the quality of care (25). The improvement brought by technology is measured in reduced hospital stays, faster return to work, and increased economic output(25). These improvements, in turn,

have increased patients' expectations of the outcomes of surgical care. However, these expectations have not always been met. The consequence has been the production of more machines and innovations. At times, this leads to the doctor spending more time with machines than with the patient. With the reduction in contact with patients, the concern may shift from the patient as a human being to the surgeon's outcome. The increased focus on improving outcomes rather than a focus on the patient leads to reduced empathy (25,42). Good outcomes have seen the development of technological centres. However, their aim is profit, which easily conflicts with altruism as the core of professionalism. The profit-mindedness, combined with the increased demand for training and increased trainee to trainer ratio, make the apprenticeship model difficult to achieve (105).

Globalization and the entry of a different generation into medicine has brought with it the challenge of interest to practice medicine in ways not thought of hitherto. Female physicians requested part-time work, so they could raise a family as well. Some physicians have been interested in working with fewer patients and who believe in maintaining a social life with interactions with family and friends, maintaining hobbies and having fun. This has led to the introduction of what Hafferty and Castellani call Lifestyle Professionalism, where the pressure of having and maintaining ones' lifestyle sometimes overrides the interest of the patient.

The challenges mentioned above lead to clinical dilemmas for practicing doctors and hence the need for a framework for decision-making that is ethically sound. These dilemmas, in part, have led to the various views of what professionalism ought to be at this point in time.

In Summary, the challenges in the literature are commercialization of medicine which in some instances leads to reduction of physician autonomy; the technological innovations that reduce physician-patient contact; profession differentiations that leads to reduced political authority because of reduction in numbers that can bargain; a new generation to whom lifestyle matters more than patient interest;, individual character that mainly makes it difficult to trust them and also to teach medical professionalism.

The challenges led to differentiation of medical professionalism into different categories even within a single cultural milieu. The next section looks at how professionalism has been taught and is being taught amidst these challenges.

2.3.1 Historical Methods of Teaching Professionalism

This section is a series of sections on how professionalism has been taught, beginning with the traditional methods, and later on looking at the newer methods of teaching morality and values and whether they have been effective.

The traditional method of teaching professionalism promoted not only the acquisition of procedural skills but also that of cognitive and affective skills (119). Students encountered knowledge, skills, and values as they saw them enacted by their teachers in the process of caring for patients. Students cared for patients under the supervision of skilled personnel, who would take time with the students until they learned the skills. This was the approach in an era when surgery as a profession was still in its early days, with few people opting for it (119).

Taking care of patients in a humane way requires more than technical competency; it involves the attitudes and value system of the physician. When the student works alongside a supervisor, the acquisition of both technical skills and values takes place. It has been assumed over the years that it is possible to learn professionalism from hours of study and by taking care of patients alongside faculty (119). The teacher is expected to serve within the framework of ethical principles, demonstrating compassion, respect and integrity; accountability to patients, society, and the profession; and responsiveness to patients' needs that supersedes self-interest (119–121).

The moral dimension of medical education was to be learned through apprenticeship, setting expectations, telling stories and parables, and interactions within the health care context. No courses in professionalism or patient-doctor communication were envisaged. Values were acquired through long hours of imitation. It required adequate exposure to various pathologies and the learning of technical skills and values through this exposure. It also required a low trainee to trainer ratio so that all trainees would have similar degrees of exposure. This framework of teaching is now changing, at least in the Western world, and has also begun to change in developing countries (122). As has been indicated above, the dominant form of professionalism that emerged was virtue-based, and this model continues to be the method that we use in our context.

The approach of utilizing the physician as a role model for learning professionalism prevailed for a long time, extending into the mid-19th century. However, Flexner's influence in 20th century America resulted in the physician who is in a teaching position also being encouraged to become an investigator (110). The working environment became so busy because of different roles, with minimal contact with patients, hence losing professionalism. The institutional milieu would be a place where the focus was always on the role of the physicians away from the patient, making role modelling difficult (14). Cruess *et al.* among other studies report that role modelling became inadequate (36,37).

In summary, the traditional method that is found in literature is role modelling or apprenticeship, and it serves surgery well because of its practical nature. Lave and Wenger's theory of community of practice fits in well with apprenticeship. This however has the challenge that is brought by generational change and globalization because of the limitations of the role model, when the teacher lives a different lifestyle from that which they proclaim.

This failure has led to a variety of teaching methods that has been introduced to enable teaching of professionalism, which will be the subject of the section that follows.

2.3.2 Methods of Teaching Professionalism and its Challenges in Medical Education

Teaching professionalism requires that it is defined, but with the complexity and difficulty in defining it, teaching it may be a challenge to the faculty (39,40). Cruess posits further that the faculty may not be familiar with professionalism, hence the difficulty in teaching (39,40).

2.3.2.1 Formal curriculum

While there is a need to explicitly teach professionalism in medical schools, there is no agreement as to whether a standard curriculum can work in any medical education setting or if they should be tailored to the specific environment (119–124) . Cruess and Cruess have been the main advocates for an explicit curriculum, arguing that the cognitive base of professionalism must be taught explicitly and reinforced through the experiences in situated learning; being not just theoretical but practical, focused, and using reflection (37,39,40,55,127,128).

There are those who think that formal curriculum might put students in straightjackets with the need to be correct and might cause them to learn just for the sake of passing (129,130). Despite this, they are not averse to a formal curriculum, and Gordon suggests that the way to mitigate this is to have an integrated curriculum within a comprehensive staged medical curriculum (130). There are those who think that learning aspects of the formal curriculum early may lead to rote learning (131). This implies by the time they require to reflect on it, they have already been socialized and hard wired with different attitudes and behaviours (131). They also argue that case scenarios that are discussed bear little resemblance to real situations, and often what is taught doesn't give grounds for growth because the environment is hostile to professionalism (131).

There are a number of ways of teaching professionalism that could be included in the curriculum, one being the case vignettes that capture the student's immediate response based on principles of professional conduct (132). This could help the student deal with unprofessional behaviours of senior colleagues that they may not be able to correct through self-reflection and rationalization (133). Some of the ways of teaching professionalism that have been included in the formal curricula are; reflective writing, the use of illness narratives and other narratives, and online clerkship, among others (134–136).

There are many ways to learn the competencies that have been identified as core to the training of skilled and professional doctors. Training methods in the Western world have changed from didactic learning to problem-based learning, which, in turn, has changed to team-based learning. These changes have taken place in recognition of the fact that, with different generations, using the same methods does not guarantee the same outcomes. Parallel to the generational issue is the development of different educational methods from teacher-centered to learner-centred methods. Hence, it is necessary to change tactics. Role modelling or mentorship may not change drastically, but it can be enhanced by a formal curriculum and its evaluation. The changes from lecture-based to patient-centred and team-based learning have given opportunities for the development and teaching of professionalism within the context of group discussions and case-based learning (137).

In another paper, which examined past, present and future medical education, Fox *et al*. looked at the introduction of professionalism in medical schools from its beginnings to the present day. They pointed to the developments in the field, from teaching conceptual knowledge and

analytical skills, to teaching specific behavioural skills, and the inclusion of other disciplines like history, literature, and case studies. They suggested that moving forward, medical education should demonstrate the importance of professionalism through its structure, and the prominence placed in the curriculum. They further suggested that the involvement of an interdisciplinary group of teachers would likely enhance the teaching of professionalism. They also suggested that professionalism should be integrated within all curricula of medical education, using case methods to enhance teaching, and including feedback and evaluation. They added that education should be tailored to the community's needs and the educational atmosphere (138).

2.3.2.2 Role Modelling

The respected role model has been the traditional agent of the transmission of professionalism from one generation to the next. Part of the reason for the success of role modelling in the past was because perceptions of the medical profession were relatively homogenous. The homogeneity in values made it easy to role model. Even in the face of generational differences, shared values constituted a common ground. In the 21st century, society is diverse and complex, varying from one region to another. Variations exist even from one individual to another; one can no longer assume shared values. New challenges are posed to the traditional values of the medical profession by modern health care systems.

The methods and philosophy of teaching professionalism have changed over time to include approaches that help reduce the distance between the teacher and the trainee, including training of faculty themselves. These changes recognize the need for deeper, self-driven, adult learning styles within the changing cultural context, that help the student own the process of their learning. Further examples of newer methods of training include an "Appreciative Inquiry" project at Indiana University School of Medicine through the Relationship Centred Care Initiative(139). In this initiative, the positive professionalism narratives of the school were sought and reflected upon through groups in order to change the hidden and informal curriculum. Such modifications were also brought about by the challenges of increased population demands on training, the commercialization of medical care, population dynamics, technological advances and reviews by medical educators. Training in medical professionalism occurs through role modelling, which requires the trainer and trainee to interact in an environment that is non-threatening. Given the increased demand for training and the

unbalanced trainee-trainer ratio, it will be necessary to have a wide-reaching formal curriculum on professionalism (27,28).

It is therefore important to note that while role modelling remains a powerful and essential tool, it is no longer sufficient for training in values in the 21st century (17,37). Hence, it will be necessary for professionalism to be taught more explicitly. Furthermore, there is an increased recognition that the environment within the teaching institution has a significant effect on the teaching of professionalism, and that this must be addressed (140,141). Even in our context, we get qualified doctors from various cultural, ethnic, and economic backgrounds at the postgraduate level. It is, therefore, difficult to assume that we all have shared values.

In their study in Taiwan, Ho et al. demonstrated that the cultural environment within which the teaching institution is situated had a significant impact on the teaching of professionalism. Their methodology was the use of consensus building among professionals through Delphi technique and nominal group technique. They found that the framework of professionalism differed from the Western framework regarding the centrality of self-integrity and the harmonization of personal and professional roles. This difference was essential because in Taiwan, Confucian teachings emphasized the integrity of the physician instead of just focusing on patient care, as is the case in the West. The authors concluded that it was neither scientifically correct nor culturally sensitive to apply the Western framework of medical professionalism universally, and there was therefore need to build a professionalism framework that reflected the cultural heritage and values of local stakeholders (12). It would, therefore, be important to find out what frameworks were common and relevant to the African culture.

On their part, Kinghorn et al. pointed to the fact that in the process of teaching professionalism, there would be different communities of moral persuasion (142). There would therefore be a need to look beyond the consensus statements given by various cultures, by deeply engaging with those cultural practices and traditions external to the practice of medicine that would sustain professional virtue. It was their advice that curricula should carry with them some openness and pluralism, giving voice to different views on professionalism, and allow for critical self-exploration and the evaluation of the claims of these communities. They further argued that these processes should integrate students. Engagement with and participation in these sustaining moral communities would promote the cultivation of virtue capable of withstanding the economic and social threats to professionalism that were inherent in modern

medical practice(142). Relman called for the organized medical professionals to defend the profession in the face of threats that would erode professionalism (143). The commercialization of medical care was one such threat as it would result in a focus on money rather than on patient care (56).

In a review to reflect on the complexity of professionalism as celebration of Flexner's role in medical education, Rabow et al. points to important factors that help us move beyond consensus statements (56). They point out that, while students get into medical school based on their attraction to the well-developed set of values they have heard about and seen, they end up being faced with conflicting operational values. Students may be getting the ideas of what medicine is from internet and media because of the rapid development of knowledge and technology. It could also be a result of medical practice and public health measures such as predictability, measurability, efficiency, productivity, and cost-effectiveness, which have come to assume more importance over time. Sometimes they carry greater weight than the traditional professional qualities of compassion, service, altruism and reverence for life, as well as the commitment to do no harm to life (56). Rabow *et al*. advocate professional formation as the process of maturation of the student's character. They argue that there are foundational values that the student comes with or expects from his teachers, but that the student will sometimes come face to face with situations where he sees his teachers demonstrate conflicting values. The conflict is because teaching staff's words and actions are sometimes obviously unethical. The process of maturation demands that, in the process of his formation, the student will choose what is right. Rabow *et al*. further argue that the student needs support in the process (56). Otherwise, he will become vulnerable to unprofessional behaviour and experience depersonalization, with the consequences of poor relationships and poor patient care.

The review by Rabow et al. describes successful professional formation processes: role modelling or the experiential and reflective process, the use of personal narratives, the integration of self, and expertise and candid discussion within the safety of the academic community. Formal and informal curricula are required. The rebalancing of attention and provision of financial support for medical education are also necessary, especially so that the faculty may take the time to teach. In another qualitative study, Pier *et al.* (144) found that the problem of instilling professionalism had more to do with lapses within the faculty than with the outside environment. The role modelling process lacked self-regulation and accountability. There was also difficulty in teaching and assessing professionalism. Their main supposition

entailed role modelling and a change in culture to address the issues of instilling professionalism associated with their environment. However , one can argue that this was only one institutional experience.

Professional formation has been known to happen within a community. Lave and Wenger came up with the idea of community of practice after an ethnographic study of how tailors learned the craft (145,146). Sinclair also had similar ideas when writing on making of doctors through apprenticeship (147). It has been noted by a number of writers that apprenticeship does take place in the context of a community, hence the need to address the issues of hidden curriculum (17,148–150). Characteristics of good role-models have been discussed so as to ensure better learning within the community (151–154). Disintegration of communities hinders professional identity formation (155).

The way in which students are taught and get to learn skills, knowledge and attitude can either be through a formal curriculum which is the tangible information being taught through the syllabi and evaluated; or the informal curriculum which occurs serendipitously in clinics, hallways etc. but teaches what the educators believe students should learn in terms of values, skills, and attitude. The hidden curriculum are the ideological and covert messages transmitted through institutional values and cultures by human behaviour and structures (156,157).

In another study involving semi-structured interviews of surgical residents and faculty members, Park *et al*. observed that values came from different sources (158). These entailed personal values and upbringing, including pre-medical school experiences, structured residency and formal instruction on values. They concluded that approaching role modelling actively (through the intentional and explicit demonstration of professional behaviour during the residency or the undergraduate student's day-to-day interaction with faculty) and providing structured and reflective self-examination, assessment, and feedback would be important for the development of professionalism.

The above findings and the associated generational differences make professionalism a complex entity so that the frameworks that work best in the Western context may not work in the developing world contexts. As such, if the context is not taken into consideration, it would be easy to teach some of the content in class but to have it negated in practice as was noticed during Stern's study (15). Regarding evidence, Ho *et al*. and Stern are the most important

studies since they are well-structured qualitative studies that demonstrate the cultural differences in so far as frameworks of professionalism are concerned (12,15). Hafferty's review is also significant because it brings out the historical evidence of the challenges facing medical education in the area of professionalism (148,153).

The process of educating residents or undergraduate students to acquire technical skills and characters that will help them practise the art of surgery without complaints from the public is complex and requires planning. Furthermore, the public may not complain even in the face of lack of best practices. Complaints demonstrate lack of trust in what is traditionally at the core of what professionalism is. Traditional training has involved immersing the student or resident in the experience of acquiring medical knowledge and hoping that, through observation and experience, he or she will acquire attitudes and behaviour that are characteristic of professionalism (140). The traditional method has changed in some contexts, as has been shown above, and for effective teaching of professionalism in the Kenyan context, it may need to change. The emphasis on mentorship at our university could be viewed as remaining consistent with the role model method, whose shortcomings are partly due to the trainee-trainer ratio.

While professionalism has become part of the curriculum in the West and the East, students are still expected to learn solely from role models in our context. At the internship level, the Medical Practitioners and Dentists Board (MPDB) does offer publications on the expected professional conduct of doctors, but this is made more prominent only when there is an ethical problem. The media have occasionally highlighted some of the issues of concern, as was the case during the *Standard Newspaper's* serialization of the subject from the 12th to the 14th of June, 2013 on the doctor who left a lady's abdomen open after caesarean section (34). However, the response from medical educators has been mute. The subject is of great importance where surgical training is concerned, as surgical interventions carry significant risk.

In a systematic review on how professionalism is being taught, Birden *et al*. found a number of integrated curricula on professionalism, some of which involve specific times for group discussion and reflection. The research was extensive and included a number of qualitative and quantitative studies, viewpoint and case reports, all from the Western world. They concluded that role modelling and reflection guided by faculty are essential, and that a formal curriculum

should be integrated and contextualized in stages of the learning of the student (159). In this review, other methods such as learning through narratives were mentioned (160,161).

Wear and Castellani also argue that long before the formal curriculum or role modelling is introduced, the basis of choosing the trainee should not only be on the marks they get but how they perform in non-academic areas, and that those on the admission committee should include those who have stakes in developing a good doctor (162). This stance is supported in turn by Gordon and Novack *et al* (130,163), whereby Gordon mentions that older students may have a greater sense of vocation than school leavers (130).

For those who are practising, one other way which has been proposed to enculture professionalism is to promote humanism through reward systems like the Arnold Gold Foundation through the Association of American Medical Colleges(AAMC) (164). Similar reward systems exist in other forms (56,165,166). This could enable values to be observed and evaluated (167). The observation may however be obstructed by lack of supervision as well as the personal character and attitude of faculty, who may require faculty development (168–170).

In summary, the methods used to teach are dependent on how one defines or conceptualizes professionalism. There is need to have theoretical aspects of professionalism as a cognitive basis but with emphasis on the experiential and not just the theoretical, and that it should be embedded in entire curriculum and be contextualized. Critical reflection that is teacher-guided and role modelling are the best methods according to the literature (17,19,165). There should be a focus on professional identity formation, which entails socialization into what the doctors would be – including character of the doctor – with less focus on narrow biomedical aspects of medical education, as well as selection of students based on humanistic traits so as to be able to assimilate the professional traits (18,19,165).

2.3.3 Role of Assessment of professionalism in motivating learning

Assessment has the potential to inspire learning, influence values, reinforce competence, and reassure the public (84). It is therefore important that a formal curriculum be formulated to facilitate assessment. This would in turn enable the learning of professional values that would take root and grow in our context. Efforts should be extended to undergraduates in medical

school, who are in the critical period for developing attitudes. Though they are taught medical knowledge and the skills required to become competent physicians, their attitudes and behaviour are not evaluated as rigorously as their knowledge and skills are (29).

Failure to learn professionalism due to lack of emphasis on assessment highlights two major problems (35). First of all, students are released into society as medical doctors with behaviour and attitudes that may be detrimental to their patients and society at large (35). When they get to their residency years, the same attitudes are carried over, even though they may be very knowledgeable and technically competent (35). It has been recognized that more complaints about physicians to medical societies relate to their unprofessional conduct than to their lack of knowledge or poor technical skills (35). Students who display unprofessional behaviour may remain unidentified in the current system, and are promoted by their adequate academic performance through tests of knowledge and skills alone (171,172). Secondly, a disservice is done to students when they are not provided with explicit feedback in this domain. They end up missing out on valuable opportunities to grow in awareness of professionalism and to improve (173).

Where there is concern as to whether medical students and residents will become skilful practitioners, sensitive and compassionate healers, as well as knowledgeable technicians, the approaches to the evaluation of learners must reach beyond the assessment of knowledge and procedural skills to their judgment and commitment to patients. Many methods for assessing students' professionalism have been developed in the West. Such methods include self-assessment, peer evaluations, portfolios of learners' work, and written assessments of clinical reasoning, standardized patient examinations, oral examinations, and sophisticated simulations. These are increasingly used to support the acquisition of appropriate professional values as well as knowledge, reasoning and skills (172,174). Quality regular assessment ensures that students take the subject seriously, and enables learning of not only objective sciences but also attitudes(175,176).

Wilkinson *et al*. acknowledge the difficulty in assessing professionalism objectively given the many definitions. In an attempt to provide a clear breakdown in their systematic review, they clustered themes and sub-themes into five: adherence to ethical practice, effective interaction with patients and those important relations to the patient, effective interaction with health care colleagues, reliability and commitment to autonomy and continuous improvement of

competence. These themes were then matched with assessments that included: assessment of an observed encounter, collated views of co-workers, a record of incidents of unprofessionalism, simulation, paper-based test, patient opinion, and self-administered rating scale. They argue that this mixture of methods of assessment takes into consideration all the facets of professionalism with some attributes like lifelong learning, reflectiveness, advocacy, dealing with uncertainty and balancing availability to others with care for one's self, which requires maturity (177).

Parker *et al*. in their report of an innovative curriculum for developing professionalism, argue for an integrated program of teaching, developing and assessing professionalism in students from entry level onward. They propose this to be integrated with referring students who exhibit problematic attributes to a committee and board of examiners which finally decides whether the students need to be passed or failed on professionalism. The committee also makes decision on whether those who fail get to be discontinued from medical school based on the assessment of their professionalism (178). Kelly *et al*. considered the use of a clinical conscientiousness index as a tool to be used in exploring professionalism in undergraduates. They concluded that it was a valid proxy for measuring professionalism because it achieved a correlation with the faculty's assessment of the same students (179).

There are those who argue that it is not possible to assess professionalism objectively. Their argument is that though the competencies of skills and knowledge can be objectively evaluated in a residency programme, the higher-level competency of professionalism is not amenable to such assessment. Thomas *et al*. argue that professionalism involves sensitivity to the clinical context, and can be validly assessed only by those fully competent to appraise it. Though subjective, it can be reproduced if the training of the appraisers is carried out competently. They further argue that striving to assess competency 'objectively' may ultimately erode the very core of apprenticeship, which is the traditional way of teaching skilled professions such as surgery (180).

In a review of how medical professionalism was taught and assessed in Newcastle, Australia, Mitchell *et al*. observed that it was easy to evaluate the knowledge part of ethical values, but difficult to assess how the student would behave in a real situation (140). Lurie *et al*. also observed that, despite the development of a plethora of assessment tests, none of them can effectively measure any competency on its own. So, it is recognized that measurement of

professionalism can be a difficult process. That may be why it has not been formalized on a wide scale (181)**.** However, in a qualitative study from one institution, Nofziger *et al*. found that peer assessment had a profound effect on the teaching and evaluation of ethical formation in undergraduate students (182).

In summary, assessment for learning as an educational philosophy should be brought to this area of professionalism, especially now that medical educators feel it is an important area. The assessment can only follow the way one conceptualizes and teaches professionalism. Where that definition is complex, the assessment tools need to be varied to reflect the situation.

2.4.1 The Role of the Culture of the Institution in Instilling Professionalism

Value systems are often inherent in the culture of the institution. While there may be a formal and explicit curriculum, sometimes, students do not learn from it. Rather, they pick up what the informal curriculum teaches. Hence, some people have spoken of a 'hidden curriculum' (148,149,173). It is possible that, even though an institution has laid out a formal curriculum for teaching professionalism, students will learn from the practices of the faculty and the culture of the institution instead (137,183). In his research, Stern found out that the values learned by undergraduate medical students were usually those of the residents, and they tended to learn them outside the times when their teachers were supposed to be available (183).

Jackson, in review of how values are learned in elementary school, mentions that there were three "Rs" associated with learning professionalism in school (184,185). These were the rules, regulations, and routines of the school or institution, which the teachers and students had to learn if they were to go through school with minimal pain (184). Applying this concept to the context of medical education, Hafferty suggested that the hidden curriculum was based on "the commonly held understandings, customs, rituals, and taken-for-granted aspects" of what goes on in medical school. For example, implicit but important messages about what is valued by the institutional community are conveyed by phenomena such as institutional policy development, resource allocation, slang, documentation and evaluation (148,156,173).

It seems, therefore, that the learning of professionalism is a complex process that goes beyond the formal setting of the relationships that develop within the educational or training community. It is something that one learns, not only from faculty but also from fellow residents

and medical students as well as from the culture of the institution and from the ease with which communication flows from one sector of the community to the other.

In a single-institution study at the medical school where he was teaching, Stern found that some elements of the recommended curriculum were taught, some were not and others were contradictory. The values that he found to be most consistently recommended in the medical curriculum were honesty, accountability, compassion, the importance of public health, and self-policing. While accountability and compassion were frequently found in the taught curriculum, self-policing and the importance of public health were emphasized less. Inter-professional respect and the importance of service were present in the recommended curriculum but were taught as inter-professional disrespect and the burden of service. The importance of industriousness was not found in the recommended curriculum but frequently identified in the taught curriculum (183). This indicates that those entrusted with transmitting a written curriculum can inadvertently ignore elements of it, or even teach the opposite. Therefore, vigilance and the continuous monitoring of the learning process are necessary to ensure that the intended outcome results.

The reviews above and research point to the fact that medical professionalism could be influenced heavily by institutional culture and even by environmental culture. Research shows that values change in medical school. One such study found that cynicism increased over time (137,186–188). In the context under scrutiny, though there were formal curricula, students graduated with cynicism and a sense of entitlement. Some have even suggested that medical schools as organizations could create an environment that is resistance to change (189). Therefore, leaving it to students and residents to learn through the events and situations they encounter may not necessarily result in their learning the required professionalism attributes of honesty, altruism, and compassion. Clearly, the environment is host to forces stronger than the formal curriculum, and this influences professional value formation. Another institutional group that could be considered are the professional societies, that in other jurisdictions have acted as catalysts for improving quality of training in both technical and non-technical skills such as professionalism (190,191). In this way, they help set what residents eventually perceive as professionalism within their nations and culture. Some studies have indicated that culture does influence personality of the individual (192).

Therefore, it would be prudent to look into the ethical culture of a community before structuring a formal curriculum. Doing this would render the formal curriculum more relevant to the student, and may ultimately reinforce it instead of negating it. It is consequently necessary to look at the cultural undertones concerning professionalism and the associated challenges therein before developing formal ways to incorporate professionalism in the training of medical practitioners.

Because professionalism is a cultural issue, as shown above, it points towards a complex problem. Every culture and context in every age have its view of what is right or wrong, and what to be done, and this will influence even professionalism in the medical field.

In summary, the literature demonstrates that there is a role that the institutional culture and the culture of the community plays in influencing the values in any particular institution. This is why those who are strong advocates for teaching and even role modelling are aware of the potentially negative effect of the hidden and informal curriculum on professional identity formation. These influences erode what is being taught and build cynicism in the attitudes of students concerning professionalism as they progress in medical school (69). The institutional environment also determines the style one chooses to learn during the student's life, which may determine the long-term retention of the concepts. In the next section, we will discuss how culture influences learning approaches.

2.4.2 Role of culture in learning approaches

The curriculum is influenced by the culture, and there is much influence from culture on how people learn (26). Entwistle delineates three learning approaches that differ from the known work on learning styles by Kolb (193–195). These learning approaches described by Entwistle include.

i) Surface approach: The learner does not make any effort to create the meaning of their experience or what they are learning. They lack purpose and understanding; they are bound by the syllabus, and they learn by memorization. What motivates them is fear of failure.

ii) Deep approach: The learner seeks to understand the meaning of their experience, relates ideas, uses evidence, has a deep interest in new ideas and is willing to explore the ideas by themselves in depth.

iii) Strategic approach: The learners are those whose aim is to achieve a certain goal by learning, and this can, therefore, lead them to deeper learning which is not their purpose. They have organised study, time management is key, and they can monitor their effectiveness. The student is directed to a goal other than learning.

These learning approaches are deeply influenced by culture if we take its definition as given by Hofstede. Culture has been defined by Hofstede as "the collective programming of the mind that distinguishes the members of one group or category of people from another" (196).With this definition in mind, he did a study across 50 countries and came up with five dimensions of culture(196):

i) Collectivistic as opposed to individualistic culture;

This dimension refers to how people define themselves relative to others. In a collectivistic culture, the interest of the group prevails over the interest of an individual whereas in individualistic culture the interest of the individual takes precedence over that of the group. Regarding learning approaches, further work by Entwistle and a review by Manikutty show that the individuals in collectivistic cultures tend to undertake strategic learning, have mutual support and focus is on relationships rather than content, while those in individualistic culture tend to be deep learners ((26,194,195).

ii) Power distance

This dimension defines the extent to which less powerful members of society expect and accept that power is distributed unequally. In learning approaches, in higher power distance cultures, since the teacher is knowledgeable, their word is accepted without question. In lower power distance cultures, the teacher is treated as a source and the students while respecting the teacher, tend to read for themselves. From the work of Entwistle and Manikutty, students in this culture tend to have superficial learning because the student looks up to the teacher, where some students may even be ridiculed because they are perceived to be rebels when they ask questions in class (26,196,197). Deeper learning, which requires original effort is therefore not possible.

iii) Short-term vs. long-term orientation

Those in short term tend to gather information in the process of learning for strategic purposes, i.e. well-paid job. Therefore, strategic learning is favoured rather than deep; in the long term, they tend to appreciate the value of what they learn hence tend to have deeper learning.

iv) Femininity vs. Masculinity

This is not about gender but traits such as competitiveness and ambition. Masculine culture values achievement, hence encouraging deeper and strategic learning, while feminine culture tends to be more obedient to the prevailing view hence tend to adopt superficial or strategic learning.

v) Uncertainty avoidance

Some cultures with high uncertainty avoidance regulate every detail hence the tendency to foster strategic learners which may also lead to deep learning, because what should be known is evident to everyone (26,196,197).

Therefore, given the cultural influence on the approaches people use to learn, as we consider how the Kenyan culture conceptualizes professionalism and in order to help nurture its development, it is important to have in mind the variety of learning approaches. These approaches are determined by culture and will guide the development of a program that will comprehensively inculcate professionalism.

Given that the Kenyan cultural leaning is towards the collectivistic as described by Hofstede and Wursten (196,198), it would be expected that our conceptualization will be more focused on relationships than on content. However, the globalization of education and of "culture" means that though one expects that our context has one major influential cultural philosophy, aspects of other cultures will be present to influence that which is prevalent in our culture.

However, even as we look at the cultural determinants of learning approaches, it is also known that teaching approaches also determine how the student learns. The teaching method could either be a teacher-based approach or a student-centred approach. The former looks at teaching as providing information hence encourages surface learning, whereas the latter looks at learning as changing the conceptions of students. The student-centred approach facilitates the student through difficult parts to see the concepts being learned, and to understand them and

therefore change; this has been said to encourage a deep approach. Furthermore, perceptions of the environment will encourage deep or surface learning (199–201).

In summary, culture of the institution and the community influences how one perceives what professionalism is, how they would learn it effectively for the long term. The teaching within the institution as driven by the known curriculum will also be influenced by the institutional culture. The cultural influence is therefore at the core of the perception, teaching and learning of professionalism, and it will be important to have this in mind in this study. In the next section, we will be looking at how it is possible to change the culture of an institution in order to succeed in effectively teaching or inculcating professionalism for both undergraduate and postgraduate surgical education.

2.4.3 Role of Leadership in Changing Culture

Because professionalism is context-based and changing values from existing cultures require change in how issues are perceived, changing the culture of an institution will require leadership. In his review of how changing a culture within the context of professionalism was managed at the Indiana University School of Medicine, Brater argues for the role of leadership in bringing about the pursuit of the culture of professionalism in the community. The leadership was engaged in crafting values and stating ideals (202,203). These were then approved by the community of the institution. The recruitment of staff and admission of students also took these issues into consideration (204). Above all, a relationship-centred initiative and the rewarding of professionalism were noted to be key in inspiring faculty and the community to pursue the cultural change (205). Given the complexities involved in building a community's culture, it is important to emphasize the leadership role and to involve leadership in every effort to change the cultural setting. This should involve policy regulation and the rewarding of professionalism.

The role of leadership is critical since, in some contexts, the culture of an institution may be hostile to professional values such as altruism, honesty, hard work and compassion. The role of leadership was noted by Christianson *et al*. in their review of the process of curriculum change at the University of North Dakota (137). It was also observed by Frenk *et al*. that, whereas the second wave of reform involved formative learning, whose aim was to socialize students around values, the third wave of reforms in medical education is about transformative learning, which seeks to produce change agents (206). In the context of the developing world,

where the second wave is yet to take place fully, it will be necessary for formative learning to go hand-in-hand with transformative learning. Formative learning cannot take place without transformative leadership in medical schools (207).

Faculty development has also been seen to have a huge role to play in professional formation. The faculty development may require leadership to perform the following: establishing a sense of urgency, forming a powerful guiding coalition, creating a vision, communicating the vision, empowering others to act on the vision, generating short-term wins, consolidating gains and producing more change and anchoring new approaches in the culture (207). Faculty development will then help to develop change agents within the community. Faculty development has been described adequately by Christianson et al. (137) and Steinert *et al*. (208) in their review articles.

In summary, in teaching professionalism, one of the issues that has been consistently discussed is the role of faculty development. Cruess suggests that the faculty do not have a clear view of professionalism themselves which they will need to know in order to effectively teach it (174). Part of the faculty development is the need for leadership in changing the culture. In the Kenyan context, medical education in general and professionalism in particular are issues that are just currently coming into the focus of the medical educators, so the faculty development will be crucial for the teaching of professionalism and other aspects of soft skills required for the development of a doctor that one would consider skilled, knowledgeable, and with a good attitude.

2.4.4 Factors in our context that may affect professionalism

i) Cost of care and its link to commercialization of medicine

Professionalism has been rendered complex in the developing world by the rise in the cost of health care in a context where more than half the population finances health care as an out-of-pocket expense. Out-of-the-pocket models mean that fewer people will seek medical attention and they often cannot afford the necessary standard of care. Lack of equipment and supplies in most public hospitals lead to many patients being left unattended to or not attended to in time, not primarily because of professional neglect, but because they are no tools that can enable physicians to attend to them for optimal medical management for their diseases. These complexities make the developing world a unique place to find out how the surgical

community perceives the practical approach to virtue-based medical and surgical practice (70,209).

ii) Increase demand, low supply of training and doctors

Our context is distinctive given the fact that developing countries have growing populations, with the majority aged below fifteen while the population of developed countries have elderly populations. The doctor-to-population ratio is very low in developing countries. The implication is that the demand for training is higher in developing countries than in developed countries. Their Gross Domestic Product is low. Thus, even though they made a public commitment to give 15% to medical health, the most that they have achieved in Kenya, for example, is 7% (210). The resources to develop and equip more hospitals for training are fewer in developing countries. Hence, there are fewer spaces for training, and consequently fewer trainers. The increased student to teacher ratio implies that role modelling, as a method of instilling values in medical students at the undergraduate and postgraduate levels, may not be as practical as it might have been.

The demands on the doctors, because they are too few to meet the population's needs results in doctors becoming overworked. The excessive workload is evident, even in medical school, where the number of lecturers does not satisfy the needs of the student population. For a better outcome for each student, undergraduate, and postgraduate, the teachers would have to work extremely hard with minimal recompense. This, in addition to a large amount of non-teaching work, can result in physician burnout. In a cross-sectional survey among medical students in seven medical schools in the United States, Dyrbye et al. found that burnout was associated with self-reported unprofessional conduct and diminished altruistic professional values among medical students (141). While one could argue that this study was focused on students, it is possible that a similar scenario would occur among doctors as well. Thus far, it has been reported that surgeons who suffer burnout commit more medical errors (211). While these may not be related to complications, they often are related to a lack of professionalism that then affects the quality of care received by patients and poses a threat to their interests (211).

iii) Corruption

Socio-economic factors play an important role in determining the cultures of institution. In Estonia and South Africa, Barr and Rooyen respectively mention the influence of corruption regarding the giving and accepting gifts (212,213). These are similar to our context as they are

low to mid income countries. Similarly, there is a culture that accepts being rich regardless of the means of enrichment, which has been commented on in the media (214). In addition, there are reports of doctors being bribed to refer patients to India (215). As has been mentioned earlier, social factors such as care for the vulnerable and world view of where there is continuum between the living and the dead makes elderly and dead people feared (98,99,216). Further, this breeds hierarchical culture where juniors are always subject to the senior even when they, the senior, may be wrong; giving no chance of correction. This was reported in Japan and Turkey where there are similar cultural norms (217,218).

iv) Increased awareness of patients on their rights

While patients' awareness is increasing, in our setting, it remains low due to the current levels of illiteracy. Patients' vulnerability due to lack of awareness puts greater responsibility on doctors, and enhances the need for values in their interactions with their patients. In addition, health-seeking behaviour is not at optimal levels, even among the educated. Patients still come in with advanced disease. This can be explained by the fact that poverty is prevalent in the population; the needs outstrip the resources, even among those who are wealthier. In addition, according to an unpublished report by the Ministry of Medical Services, 70% of health care is funded by out-of-pocket expenses from patients. This makes them delay efforts to address their health issues until they can no longer tolerate the disease (Unpublished MOH documents).

For medical students, the choice to attend medical school is not necessarily personal. Most often, the choice is made because one has passed the secondary school exams well (165). Given the prestige that doctors are accorded, students choose medical education without an idea of its demands. Instead, they often think more about doctors' potential earnings from their patients. The obligations and responsibilities that come with the profession are relegated to the background (165). Secondly, some students choose to attend medical school because it is their parents' choice. In recent years, many have opted for career changes after graduating from medical school and discovering that they cannot cope with the demands of the profession (165).

Because most of the medical schools are government-owned and state funding is low, the schools struggle with the remuneration of teachers and are unable to develop an adequate infrastructure in the face of the increased demand for training. In recent years, funding has come from privately sponsored students. This means that the school has to enrol twice as many

students as can be comfortably taught. This outstrips the capacity of the trainers to provide quality teaching through role modelling and the capacity of the hospitals to provide adequate patients and supplies for teaching purposes.

Most medical schools do not have their own teaching hospitals. This means that they have had to enter into contractual agreements with government-owned hospitals for training. This gives rise to the complexities associated with two administrative arms in one hospital. As leadership is needed to facilitate a change in culture, this can be a challenge.

The dual ownership of the facilities means that one side may expect the other to take the lead in acting on some issues. Those that require immediate attention and can affect learning could be left unattended for a long time. Furthermore, the results of dual ownership, where the university may not have much say in the running of the hospital, are evident in some Western cultural contexts in the form of the corporation movement. Doctors there work for investors who are seeking income from their investment, but themselves have no moral obligation to the patients (68).

These problems are not unique to our context. In their letter to the editor of the New England Journal of Medicine, written in response to the article by Cooke *et al*. (24), Huwendiek et al. (219) identified some of the challenges to medical education in their context. They mentioned that a survey on the problems of medical education, which received responses from Europe and America for the most part, noted that the main challenges in medical education included lack of academic recognition, funding, faculty development, recognition of medical education issues, and lack of institutional support. In addition, they identified areas that would help improve medical education. These included the development of medical education research methods, computer-based training, and course and curriculum evaluation. They were all identified as high-priority needs (24). This scenario would also be true for the developing world.

2.5 Summary of the Literature Review

The variety of studies that have looked at how professionalism is conceptualized does not have one single definition that is accepted by most of the medical educators and medical sociologists. In general, concepts are either from a traits and behaviour angle, the majority focusing on

personal character of the individual doctor from which the behavioural traits arise. The medical profession arose from humble beginnings and was modelled along the craft guilds until it reached its zenith when it was one of the dominant professions, and at those times the dominant way of professional conceptualization was based on virtue. This dominance was challenged by a variety of factors including commercialization, professional differentiation, technological advances and an inability to properly regulate themselves, implicitly indicating character problems. This then led to a variety of subsystems in conceptualization of professionalism majorly in Western culture.

The conceptions of professionalism differ from one cultural context to another. This implies professionalism is a socio-cultural construct. They have mainly been studied in the Western world, with increasing literature from Asia and the Arab world. Most of these studies have been of the consensus building type that is prone to group thinking. No known study has been carried out in Kenya. In Africa, only South Africa have attempted to look at how students view the professional charter fitting in their context. In Uganda, a study carried out to look at how students learn professionalism also concluded that the Western model does not fit, but did not have any other model because that was not the focus of the study. In both Uganda and South Africa, the challenges were similar: that of resource constraint. In both contexts, the main way of learning medical professionalism was by role modelling. The challenges in our context have not been enumerated clearly so as to be of use to anyone who wants to mount a curriculum.

Though the dominant way of learning professionalism remains the traditional role modelling or apprenticeship, it is inadequate because of incongruences arising from lifestyle that portray a different value from what the faculty teaches. There is agreement on teaching the cognitive base then following it with integrated curriculum that is practical and is taught in every year. It is also noteworthy that cultures of the institutions and communities' influence learning approaches, and the approaches influence retention for long term practice. Leadership is required for cultural changes within the institutions and the communities, in order to effectively teach and inculcate professionalism through programs that are accepted institution wide. Faculty development is important in this regard.

In Kenya, there is a rudimentary formal curriculum that is not integrated from year one to the next. The method of teaching is mainly didactic. The literature points out that teaching of professionalism should begin by defining it and that this is context-based.

This study therefore sought to explore the concepts of professionalism within Kenya as part of the larger Africa because most of the cultures are similar. Because the utility of the study is to eventually effectively teach professionalism, it sought to establish how it has been taught, the challenges of practising and teaching professionalism and how it can effectively be taught. The study explored this from the surgical community that include the faculty, the students both in their postgraduate and undergraduate studies, the nursing staff in surgical wards, the nutritionists, occupational therapists and physiotherapist working in surgical wards. The next section outlines the details of how this was done.

2.13 Research Questions

Based on the literature review, our context and the objectives above, the following research questions were formulated

1. What are the major concepts of professionalism within the University of Nairobi's surgical community, and what are clients' perspectives on what a good doctor is?
2. How is professionalism taught at the medical school?
3. What are the main challenges to the practice of professionalism at the University of Nairobi?
4. How can the challenges to the practice of professionalism in a developing world be overcome so as to effectively teach professionalism?
5. Why is professionalism perceived the way it is in Kenya?

CHAPTER 3
METHODOLOGY

This chapter provides a description of the methodology used in this study; the design, duration, population, site and setting, sampling, instruments, data collection data analysis and interpretation, and management of data. The basis of the study methodology is that of social constructivism: The need to gain an in-depth understanding of the socio-cultural aspects of the participants' concepts through open-ended interviews and use of survey to determine the distribution of concepts within the surgical community in the University of Nairobi.

3.1 Study design.

A mixed methods design was applied. There are six ways of mixing qualitative and quantitative data depending on the research questions to be answered. The mixing type is defined by mainly 3 issues; timing, weighting and mixing (220). The six strategies of mixing qualitative and quantitative methods are described below.

Sequential explanatory strategy begins with quantitative then qualitative approaches to the explanation of the findings in the quantitative.

Sequential exploratory strategy begins with qualitative then quantitative, to either expand the knowledge or determine distribution of the phenomenon within the chosen population.

Sequential transformative strategy uses either method at the beginning, but the main guiding principle is the theoretical framework used by the researcher. It helps give voice to those who may be having a different opinion and also to understand the phenomenon being changed.

Concurrent triangulation strategy occurs when both methods of data collection are used at the same time for confirmation or disconfirmation purposes with both phases being equal.

Concurrent embedded strategy uses one method as the primary and the other as secondary data source. The secondary data source is then embedded within the primary.

Concurrent transformative strategy is use of both methods to collect data concurrently but guided by a theory like the sequential one (220,221).

This was an exploratory sequential mixed method study that began with qualitative interviews for exploratory purposes, followed by a quantitative cross-sectional survey for the purpose of generalization. Exploratory sequential mixed methods are useful in studying phenomena (220).

The exploratory phase was a qualitative study applying grounded theory. It was conducted using semi-structured interviews of key informants and focus group discussions. The relevance of the qualitative method lies in its in-depth approach to data gathering. In-depth interviewing

is a principal means to explore the ways in which research participants understand and experience their world in their words (222). The essence of this method is the assumption that people have essential and specific knowledge about the social world in which they live, which can be articulated through verbal messages (223). The method also allows the researcher to see the world from the participant's point of view. It thus allows researchers to make sense of the multiple meanings and interpretations of a specific action, occasion, location, or cultural practice (224). The method permits the researcher to delve into the "hidden perceptions" of participants (4).

In this phase, through an inductive method, research questions above were used to guide the interview or discussion. The participants freely gave their perception of medical professionalism, its gaps and the challenges of its application. In other words, the concept or theme, for that matter, was arrived at by the inductive method of collecting the data, being sensitive to the concept, coding and analysing without getting bogged down by preconceived ideas about professionalism from other quarters. Instead, in this grounded theory design, the review of the literature is treated as another source of data for integration into the constant comparative analysis process as the core categories, its properties, and related categories emerges.

The body of evidence involving a review of documented malpractices and deviations from the expected norm that was acquired from MPDB (Medical Practitioners and Dentists Board) was subjected to trends analysis; to decipher the changes that are taking place either in the subject or the degree of challenges facing professionalism in Kenya. Furthermore, the key informant interview with a former chairman of MPDB was treated as other sources of data for integration into the constant comparative analysis process as the core categories emerged. This phase took six months. This method, however, does not lend itself to rigorous statistical testing so as to make meaningful inferences that could be generalised, so for that purpose, we included a cross-sectional survey phase that then lends itself to statistical testing as indicated below.

The second phase was a quantitative method of cross-sectional survey type. It was guided by a questionnaire that was prepared based on the findings from the qualitative phase.

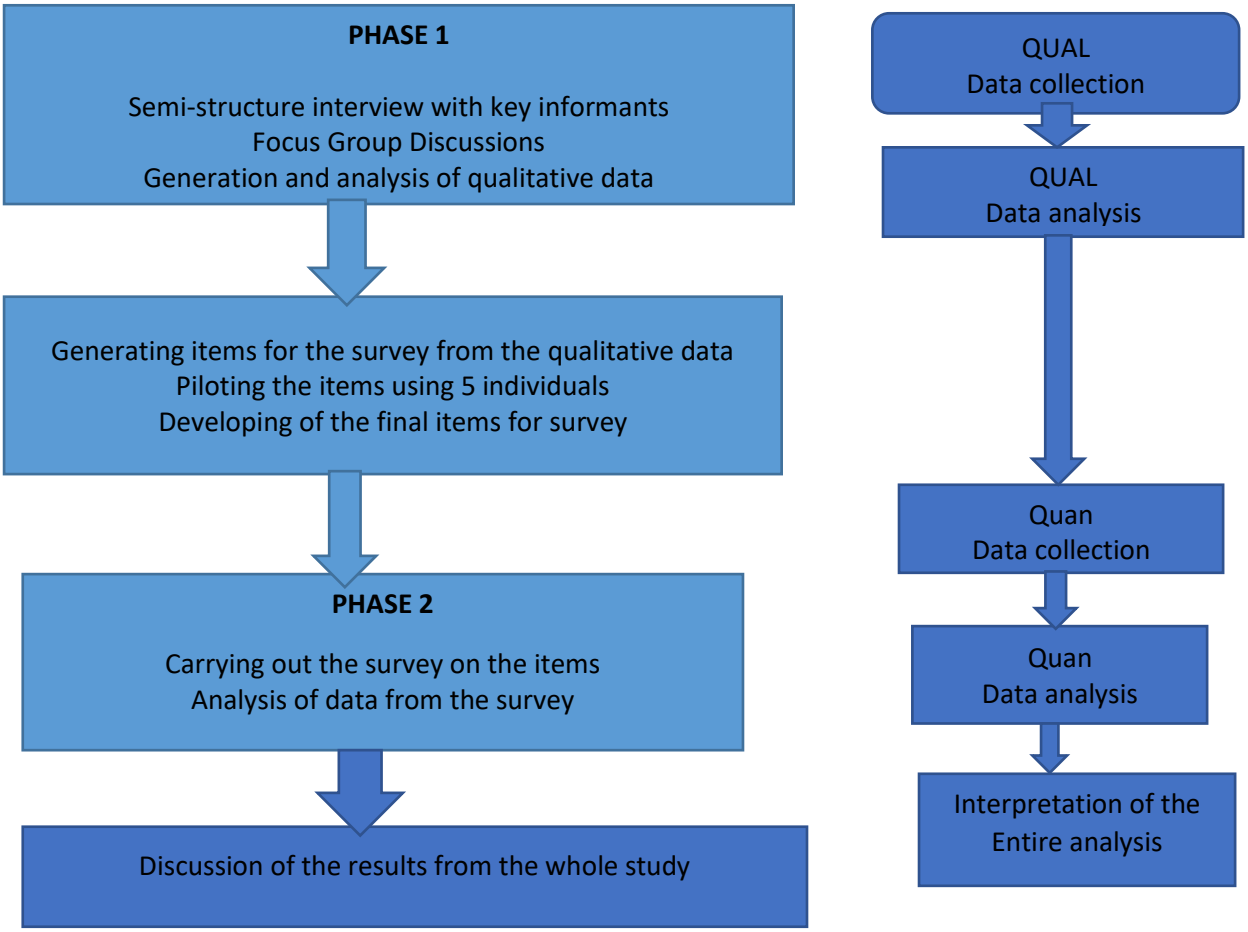

Figure 2: Research design

The mixing of the methods was done at two levels; the analysis of the results of the exploratory qualitative phase was used to develop items as a survey tool for phase two, and the other level was at the level of interpretation of the results of both phases. The survey was performed to determine the frequency of the traits and behaviours that are codes for professionalism within the surgical community from the participants. This would allow for generalization of the study results. The weight of the study is on the first phase since we are exploring a phenomenon from within a learning community. Activity theory of Vygotsky informs the method since this study uses the learning environment as a single unit (46). I chose to use the surgical community as the learning environment for this project.

The pictorial view of this would be represented thus as is shown in Figure 2.

3.2 Study duration

Six months (1st July 2014 to 31st December 2014) for qualitative arm and four months (1st January 2015 to 30th April 2015) of the quantitative arm, a total of ten months.

3.3 Study population

The population that was interviewed consisted of teaching members of the University of Nairobi Department of Surgery, surgical consultants of Kenyatta National Hospital, residents doing masters of medicine in surgery, medical students in third and fifth year in surgical rotation during the time of the study. Medical students take six weeks in their surgical rotation. The interview took place at the fourth week of rotation. Other partcipants included nursing staff, nutritionists , physiotherapists and occupational therapists of Kenyatta National Hospital working in the general surgical wards at the time of the study. Outside the clinical context I also interviewed the legal representative of the MPDB. The present chairman and the preceding chairman are both members of the faculty and during their interview as members of faculty, I asked them about the challenges on professionalism from the MPDB view. I had an in-depth interview with the patient's in general surgical wards at the time of the study to get the perspective of the recipients of the services.

The study population represents the surgical community of the University of Nairobi who are involved in the delivery of surgical education, and the regulators of the conduct of doctors with the republican of Kenya. These participants were selected for this study to enable us to explore the concepts of professionalism among the surgical community. The study population was the same for both phases except the MPDB was excluded in the second phase. This was because the second phase was on the determination of the distribution of the phenomenon among the surgical community at the University of Nairobi.

3.4 Study site and setting

The study was carried out at the University Of Nairobi Department Of Surgery, Kenyatta National Hospital general surgical wards and the Medical Practitioners and Dentists Board.
In Kenya, we have two main medical schools with new ones coming up very rapidly. This study was based at the first medical school to be established in Kenya in 1967 (225). It has been engaged in medical education for the longest period of time compared to the other medical

schools in Kenya. Therefore, it is likely to have developed its culture and perception of professionalism over an extended period of time. The University of Nairobi is the oldest and largest health professional training institution in Kenya, which offers training in a variety of health care disciplines to about 1500 students through 6 undergraduate and 18 postgraduate programs annually. Until seven years ago, it was the only institution in Kenya that trained surgeons. As of 2015, the total numbers of staff employed in the department of surgery are as follows: 12 professors, four senior lecturers, 17 lecturers and seven tutorial fellows. The department of surgery comprises faculty trained in the following subspecialties: general surgery, otorhinolaryngology, neurosurgery, plastic surgery, cardiothoracic surgery and paediatric surgery.

The main clinical training site is Kenyatta National and Referral Hospital, which provides additional clinical teaching staff; however, staff-to-student ratios are still considered inadequate by instructors and students. The department of surgery teaches undergraduates of the 5 year Bachelor of Medicine and Surgery (MBChB) programme, in their 3rd and 5th years of study (now changing to fourth year and sixth year due to change in the structure of the curriculum). They also teach third year students of the Bachelor of Dental Surgery (BDS). The postgraduate class comprises about 45 students from postgraduate year (PGY) 2 to PGY 5, because PGY1 are not in clinical areas. The teaching methodologies of these programs are still the traditional lecture-based model with clinical exposure and electives. The surgical wards and main theatres are further staffed with nursing officers, nutritionists, physiotherapists and occupational therapists. These groups together make up the education community from which the student learns skills, knowledge and behaviour. Three years prior to the time of the study and during the study, University of Nairobi School of Medicine had a collaboration on medical education through the Medical Education Partnership Initiative with the Washington University. This helped the a number of departments with awareness on issues on medical education including professionalism, but for some reason there was no uptake from the department of surgery (226).

The University of Nairobi uses Kenyatta National Hospital (KNH) as the teaching hospital. The administration of KNH is different from that of the University of Nairobi, College of Health Sciences. The consultants of KNH are also meant to teach the University of Nairobi students and registrars both at undergraduate and postgraduate level.

The Medical Practitioners and Dentists Board is a government body that is under the Ministry of Health. It is a regulatory authority that licenses physicians and dentists at all levels, from internship to consultant level. It also receives and acts on complaints from the public and other non-governmental actors on the conduct of doctors and dentists. The action includes discipline of errant doctors and dentists that may include suspension of their license. The leadership consist of 9 individuals who are mainly chosen by the doctors and dentists themselves, with the government having 4 slots; the Cabinet secretary responsible for health appoints the chairman, who should be a doctor. Medical Practitioners and Dentists board was chosen as source of data for the trends in the errant physician behaviour reported within Kenya.

3.5 Sampling

a) Qualitative interviews

The key informant interviewees were selected through purposive sampling. The selection was based on consenting members who were willing to participate, among faculty members who had worked at the University and KNH for at least 20 years or more. At the time of the study, the maximum number that could have been reached in this group were 18, excluding the departmental supervisor. The individual senior faculty member was approached and had the purpose of the study and its importance to the institution explained to them. Those who consented were asked for their convenient time of interview for about 1 hour, which I then scheduled to do.

For the patient, the ward of the principal investigator was targeted, which is a 45-bed ward. The nurse-in-charge was asked to label the beds that had patients who could communicate well in either English or Kiswahili. She got 15 patients at that time, who were then tabulated in random order and interviewed in numerical order. The reason for an in-depth interview with the patient was because patients may not be homogenous in the language they understand, as well as in their understanding level, and therefore it could have been difficult to conduct focus group discussions. More importantly, the interest was in the individual experience with service delivery.

The Medical Practitioners and Dentists Board was interviewed on the reported malpractices as well as the common reasons for malpractices in the country. The purpose and intent of the study was explained to the Chief Executive officer of the MPDB, who advised that the best

person within the board would be the legal department, which is involved in the complaints or unprofessional behaviours of the doctors as they are legal processes. Arrangements were then made with the legal department for the convenient time for the key-informant interview.

The focus group discussions were conducted with faculty members who had worked at the department for less than 20 years, registrars, medical students, nurses, nutritionists, occupational therapists and physiotherapists. Twenty years was chosen arbitrarily, but also gave good room for knowing the culture, having brought forth generations of students.

During the study period, the faculty members who could participate in the focus group discussions group at the time of the study were 36, excluding myself. I explained my study purpose to all staff members after a staff meeting, and those who consented arranged with me for the convenient time of meeting in a group for discussion depending on their timings.

I also talked to registrars after journal club explaining to them the purpose and the intent of the study, why it is important and why they should be involved. I arranged convenient timing for the discussions with those who consented. At this point, the number of registrars from year 2 of study to year 5 was about 45.

At the time of the study, there were three general surgical wards, with about 4 nutritionist, 2 occupational therapists and 4 physiotherapists. Every ward has about 20 nurses but at any one time there may be about 4-6 nurses in a shift. The best time at which to find all nurses is the morning (between 7.00am and 8.00am) when they are handing over. This time, every ward has about 10-15 nurses meeting for the handing over process, as well as nutritionists, physiotherapists and occupational therapists. Every ward also has a nurse-in-charge. I explained the study to the nurse in-charge of every ward, who then arranged for me to talk to the nurses. Those who were willing to be involved in the study were talked to after the handing over meeting.

The medical students rotate in surgical wards for 6 weeks in 5^{th} year and 8 weeks in 3^{rd} year (at the time of the study). Every group has between 15 and 18 students in number. In the period of 6 months when the study was on going, this would be about 3 and 4 groups for 3^{rd} and 5^{th} years respectively. Consent was sought from the individual members of the group by way of explanation to the group. A time of their convenience was arranged for the focus group discussion for those who consented.

The various groups and key informant interviews were performed until thematic saturations. The groups or individuals that were not interviewed were either because of failure to consent or achievement of the thematic saturation. Thematic saturation was not considered for any particular group but as for the whole surgical community deriving from Activity theory, since we were taking the learning environment as a unit. The MPDB was interviewed as key informant because they are the custodians of the complaints lodged against the doctors and therefore there was no need to reach saturation on that point. All focus groups consisted of a maximum of 10-12 participants. The duration of each interview was about one to two hours.

b) Quantitative survey

The second phase required a survey sample that was stratified into the categories of faculty, residents and undergraduates, nurses, occupational therapist, physiotherapist and nutritionists at Kenyatta National Hospital. A convenient sampling method was employed, where an explanation is done to an individual or a group, and those who consented picked the questionnaire.

3.6 Sample size

For calcluation of the sample size, the Cohran's formula and correction for infinite population was used. I estimated the population to 450 (this included medical students rotating in surgery at the time of study, the surgical faculty, nurses, nutrtionists, phsyiotherapists, occupational therapists , surgical registrars. The figure at that time was 447 in total), a margin of error of 5%, a confidence level of 95% with a response distribution of 50.

Step 1: Calculating the sample size

$n_0 = \frac{z^2 p(1-p)}{e^2}$ no=1.96 x 1.96 x 0.5(1-0.5)/0.05 x 0.05, n_0=384.16

n_0=sample size as calculated, Z=confidence interval for 95%, p=population distribution, e=margin of error.

Step 2: Finite Population correction

True sample $= \frac{\text{(Sample size X Population)}}{\text{Sample size+ Population -1}}$

True sample size =$\frac{384.16 \text{ X}450}{384.16 + 450 - 1}$

True Sample size is 207.49

Rounded up to 208

3.7 Data collection instruments for qualitative phase (Phase 1)

The development of the discussion guide and issues to be covered was developed from the research question. Data collection was through focus group discussion and the individual interviews. In the focus group discussions and interviews, the principal investigator was the moderator. He was accompanied by a study assistant, who is a qualified qualitative study interviewer, recommended by the School of Public Health. She studied sociology at a bachelor's degree level. She had 2 years' experience as a field officer for qualitative studies done by the school of public health. The role of the assistant was to record the interview using an audio tape recorded and also take notes verbatim so that the principal investigator could concentrate on the interview. Voice recording was also done because of the nature of the interviews that required extensive logistics and recording. The interviews were taped and recorded using a Sony ICD BX112, 2GB digital voice recorder.

3.8 Data collection procedure for Phase 1

All the interviews were moderated by the principal investigator. In the focus group discussions, the investigator explicitly explained again to the audience what the study was about. To avoid identification of participants or avoid participants using names of individuals which may lead to their identification later on, each participant was given a number to maintain confidentiality during the focus group discussions. The participants were asked to avoid mentioning the names of other participants but refer to them by the numbers given during the discussions. The individual interviews were carried out in the senior faculty offices or the principal investigators office when they preferred it within the University of Nairobi. The focus group discussion for the nurses were held in the wards where the nurses meet for handing-over near the nurses' desk, and for both postgraduate and undergraduate students, they were held in my office. The focus group discussion for the faculty were held in my office and in the seminar room. For the individual interview, there was no requirement for identification.

The research questions were used as guiding questions for each session of the interview.Each question was asked in turn so as to avoid confusing particpants. For the health care workers and students the guiding questions were:

i) In your view, what are the major concepts of medical professionalism within in surgery?

ii) In your view, how is professionalism being taught at the medical school?

iii) In your opinion, what are the main challenges to the practice and teaching of professionalism at the University of Nairobi?

iv) How can the challenges to the practice of professionalism at the University of Nairobi be overcome so as to effectively teach professionalism?

For the patient:

i) How would you characterize a professional doctor? What would you like the young doctors to be taught in order to be good doctors?

The questions began by asking each participant to say what they thought professionalism was in their view, until they were no more mention of new points in the group; and if they repeated , the principal investigator asked for clarifications. The concepts were then discussed within the group. For the patient , they were asked what in their view a good doctor should be and the ensuing conversation then follwed around that question.

The Medical Practitioners and Dentists Board legal representative was interviewed on the number of complaints and trends in the number and what she thought was the cause of the trend.

3.9 Data Analysis for Phase 1

The main data for analysis were the audio records of the interviews. The records were transcribed word for word as well as meaning for those few cases that used Kiswahili. The transcription was performed by a transcriber who has had 3 years of experience with the school of public health. He listened to the tapes and transcribed the discussions using meanings for Swahili and verbatim for English. The principal researcher then listened to the tape, at the same time proof-reading to see the accuracy. This was done three times. It was deemed adequate for accuracy to exclude “member checking”. Codes and themes from the codes were then extracted from the transcripts. The transcription was entered into Atlas 5.2.0 to help with counting of the codes.

The reading of the data coding was performed manually, while indexing was performed using Atlas version 5.2.0. Constant comparison involving coding of the conversations in their meaning and groups of words used was performed. The literature review was used at this point to help in what has been noted as a trait on medical professionalism. The coding was done for all the four research questions used. I used open coding; the codes were used to build emerging concepts and themes on what the participants felt professionalism was, how it was taught, its challenges and how the challenges could be overcome in order to effectively teach it. The process involved comparing statements used by interviewees with the statements of interviewees that came before for similarity, then similar words and/or concepts were put together as codes.

The types of codes used were those that were perceived to correspond to recurring themes of the perception of professionalism, the frameworks evident at the University of Nairobi, the context in which it trains surgeons and students.

3.10 Development of tool for Phase 2

After the analysis of the qualitative data, a tool using the codes found during the interview was developed (Appendix 6). The tool was piloted with 5 faculty members. The reason for faculty members is because I wanted to work on survey items that would be user friendly in terms of time and clarity. The items concerning each area were detailed in the questionnaire. Informants responded on a 4-point Likert scale: strongly agree (4), agree (3), disagree (2), strongly disagree (1). The exception was the last question on how to teach after overcoming the challenges that had 5-point Likert scale based on usefulness from extremely useful (5), very useful (4) useful (3), not useful (2), extremely useless (1). This was based on the fact that the same ideas had been asked in the question on overcoming the challenges and effectively teaching professionalism. The concern was the length of the items and that some were very similar, so this was solved by merging some of the codes. The resultant tool is what was used in the main survey (Appendix 7).

In developing the tool, the placement of the items did not follow any particular order. The idea was to find out the distribution of the concept either word for word or in similar or related words.

The reason for developing the tool to carry out the survey is because I wanted to further explore the dominant theme which is difficult to gauge in a qualitative survey.

3.11 Data collection and procedure for phase 2

This was a self-administered questionnaire with a clear statement of the purpose and consent from the beginning. I talked to the participants individually and in groups about the questionnaire as part of the research and those who consented took the questionnaire. The sampling for this phase was convenient sampling.

The checklist used during the distribution of the questionnaire as exclusion criteria was whether one was involved in the qualitative phase in the survey tool, but this was asked verbally in order to avoid giving the questionnaire to those who had participated in the qualitative survey. The questionnaire was distributed by the principal researcher and the research assistant.

3.12 Data analysis and interpretation for phase 2

It is important to note the reason for the survey. It was not to confirm the results of the interview but to find the distribution of the concept among the participants. Analysis using Computer Assisted Qualitative Data Analysis (CAQDA) can count a statement by one person twice, even three times from one conversion that was transcribed. It can therefore be misleading since it is not a frequency of the view or the concept in any sense of the word.

The findings were entered into SPPS version 20 for analysis. Descriptive statistics were used to analyse responses from the survey to identify measures of central tendency for each item. This was to establish the distribution of the concepts among the surgical community. Factor analysis and Promax rotation were performed using Kaiser-Meyer-Oklin Bartlett test. Factors with Eigenvalue <1 were excluded. Internal consistency reliability was determined by employing Cronbach's α. Bivariate analysis was used for correlation between the survey results and nominal. Independent variables such as gender and role in training institution was performed using Pearson r while the correlation with the interval/ratio variables such as age and number of years in the institution was performed using Spearman rho. The statistical significant level at 95% confidence interval was assumed when the p value is <0.05.

Factor analysis was performed for groups of items in each research question. It was performed in order to find out which items are of the same idea that would thus be grouped together. In other words, can the survey mirror the ideas that I found during the qualitative analysis? Could it help better understand what the conceptions of medical professionalism in the surgical community are?

In order to perform factor analysis, one has to perform Kaiser-Meyer-Oklin Bartlett test. This will determine whether the items can be factorized. The test results range from 0-1 and any test above 0.7 is considered a good result that can proceed to factor analysis, whereas if test results below is 0.5, proceeding to factor analysis may not be useful. Rotation is one of the mathematical regression tests on the factors during the factor analysis, depending on whether the factor are correlated or uncorrelated (227). Promax is one of the rotations when the factors are believed to be correlated (227).

Eigen value of less than 1 does not demonstrate strong alignment or confluence of items, hence the reason for leaving them out when choosing the factors to use. This kind of analysis is useful when surveying issues that require a generalizing theme while the qualitative study results can only give traits or behaviours considered to be those of medical professionalism, which in this study was codified to items.

Data analysis was performed by the principal investigator with the assistance of a statistician for the quantitative data and a qualitative data analyst for the qualitative data. The statistician's role was text entry into the Atlas version 5.2 and also data entry to the SPSS version 20.

3.13 Credibility of the data

The internal validity of the qualitative data is based on the fact that there were prolonged and repeated observations by both the principal investigator and the transcriber. This was achieved by reading and re-reading, as well as by listening to the tapes by the principal researcher and the transcriber. The statisticians had a computer-assisted qualitative data analysis software that supplemented the coding, but this was further confirmed by the principal investigator, study assistant, one of the supervisors from the School of Public health and the statistician. The validity of the questionnaire was based on the fact the instrument was pre-tested and refined.

3.14 Transferability of the data

The external validity of the qualitative data is based on the fact that there is adequate provision of cultural context of the environment both in methodology and in literature review. We also have referred adequately for the work.

3.15 Dependability of the data

The reliability of this data is based on the fact that there are records that one can audit with a lot of consistency of the data.

3.16 Conformability of the data

Similar to the above, the data can be checked and audited for conformability.

3.17 Management of data collected

The data gathered through the recorder and notebooks are kept in the custody of the principal researcher for five years after which the data will be destroyed. The data entered in the software will be held for the same period before being discarded.
The survey data is also kept in the file for a five-year period after publication and therefore can be audited for conformity and dependability.

3.18 Ethics

Permission to perform the study was granted by the Kenyatta National Hospital and University of Nairobi Research and Ethics Committee KNH/OUN ERC (Reference Number: P59/11/2013).

3.19 Limitations and challenges of the study

As with any qualitative study, the knowledge produced might not be generalizable to other people or settings since it is context-specific, but can be transferred to similar contexts. Making quantitative predictions based on a purely qualitative study is not possible. This was mitigated by the survey method during the second phase. At this point, there was a pre-structured questionnaire, based on the qualitative findings; that was filled by participants from a similar context and similar backgrounds.

The limitation of the study design is an overlap between interview participants and survey participants. Eleven participants who were part of both phases of the study could have entered bias into their survey answers because of the influence of the earlier interview.
A second limitation of our study was the non-random accrual of study participants. We may have an overrepresentation of people who had either strongly negative or positive thoughts about professionalism as this may have been their impetus to agree to participate. The Hawthorne effect was eliminated by the style of interview, by the principal researcher giving no idea of his thoughts beforehand to the students and colleagues.

This study may not account for views of individuals, workers or patients who know little or nothing about professionalism, as it is possible that they were more likely not to volunteer for a study about a topic they do not know or understand. Therefore, future research could include an investigation of the magnitude of awareness or lack thereof of these professionalism concepts on a larger population-based or random sampling basis.

In summary, because the main objective of this study was to explore the concepts of medical professionalism among the surgical community at the University of Nairobi, we used the explorative sequential mixed methods to explore the concepts and determine the distribution among the participants.

CHAPTER 4

RESULTS

This study aimed at exploring the conceptualization of medical professionalism, how it is taught, the challenges in teaching, as well as practice of professionalism in the Kenyan setting, with a view of establishing how it can effectively be fostered. This Chapter presents findings based on an analysis of the interviews and data collected during the survey. In order to explain and delineate points raised by participants, relevant quotes from the interviews are included in this section. The findings are presented by objectives.

A summary of the number and types of interviews is presented in the table below. There were 16 focus group discussions and 19 key informant interviews.

Table 2: Number and type of interviews

Participants	**Number of interviews**	**Number participant per interview**	**Total Numbers of participant interviewed**	**Key**
Focus Group Discussions with medical students	9	10-12	104	FGD M1-9
Focus group Discussions with faculty members	2	12	24	FGD F1-2
Focus Group Discussions with nurses, nutritionists, physiotherapists and occupational therapists	2	11	22	FGD A1-2
Focus Group Discussions with registrars	3	12	36	FGD R1-3
Key informant interview with senior faculty members	10	1	10	KIF1-10
In-depth interview with patients	8	1	8	KIP1-8
Key informant interview with the legal representative of the medical practitioners and dentists board	1	1	1	
Total number of interviews	**35**	**1-12**	**205**	

In the quantitative phase, 188 out of the 250 questionnaires were completed. This number included 10 questionnaires distributed among patients, with 8 respondents. Patient input was only analyzed in the perception of professionalism. Since patients were not surveyed for other objectives, the questionnaires analyzed for objective 2-4 were 180.Table 3 shows the distribution of respondents who participated in the survey by cadre. The mean age was 31.24 +/-9.8 years with a male-female ratio of 1.7:1.

Table 3: Distribution of participants by cadre

Cadre (n=188)	Number	Percentage
Faculty	28	14.9
Registrars	28	14.9
Medical Students	100	53.2
Nurses	15	8.0
Nutritionists	4	2.1
Physiotherapists/Occupational therapists	5	2.7
Patients	8	4.3
Total	188	100

With regard to how long a participant had been at the institution, both registrars and medical students indicated they were students. 5 participants did not indicate how long they have worked in the institution during the survey. Those who had been in the institution for more than 20 years and participated in the survey were 8 (4.3%) (Table 4).

Table 4: Number of years participants have been in the institutions

Number of Years or role	**Frequency**	**%**
> 20 years	8	4.3
10-20 years	13	6.9
5-10 years	5	2.7
1-5 years	21	11.2
Student	128	68.1
Patient	8	4.3
Participants did not indicate role/duration	5	2.7
Total	188	100

4.1. The concepts of professionalism of health care workers and students at the University of Nairobi

This objective set out to understand and delineate the conceptualization of professionalism according to the participants that were mainly drawn from the surgical community of the University of Nairobi, and patients at Kenyatta National Hospital. These was done through group interviews, as well as at an individual level in phase one, and through a survey process in phase two. The main aim of the survey was for corroboration of the findings of the interview and to confirm the predominance of certain views.

4.1.1. Results of interviews on the view of participants on their concept of professionalism

There were 16 focus group discussions and 18 individual interviews as indicated in Table 2. The interviews generated about 23 concepts that the participants reported as reflecting the main component of professionalism (Table 5).

Table 5: Concepts of professionalism from the interviews

	Concept	*		Concept	*
1	Respect	71	13	Availability	7
2	Communication	62	14	Etiquette with good grooming,	7
3	Character	48	15	Commitment to work ethic	6
4	Values	46	16	Consulting other peers/colleagues	5
5	Knowledge and technical skill	38	17	Putting patient first	5
6	Honesty	31	18	Working within ethical boundaries	5
7	Integrity	23	19	Do no harm,	4
8	Empathy	21	20	Equality	4
9	Quality of care	14	21	Accountability	3
10	Confidentiality	15	22	Justice	2
11	Timekeeping	14	23	Humility	2
12	Social and interpersonal skills	8			

*Key: * The number of times the concept was mentioned in all the interviews*

Emerging themes

Using thematic analysis of the interview transcripts, three themes emerged that comprised of the following concepts in table 6 below.

Table 6: Emerging themes and the concepts of professionalism

Themes	Component concepts
Personal character and societal values	Respect Empathy Values Humility Etiquette and grooming Good work ethic Honesty Integrity
Ethical values concerning patients	Patient rights Justice Loyalty to patient Equality Do no harm Ethical boundaries Putting patient first
Excellence in service	Responsibility Accountability Time keeping Communication Commitment Quality of care Availability Knowledge and skills

For clarity, we have included below examples of responses that were categorized into each of the three themes to delineate further the themes:

1) Personal Character

A professional physician should be one with character. A number of the character traits were pointed out by the participants as the components of professionalism as they conceive it.
One of the main concepts in this theme was respect. The participants placed emphasis on the relationships between patients and doctors, and in particular, the values and virtues of the physician that would maintain that relationship. The responses involving respect were reported about respect between the physician and his/her patient, or the respect among colleagues. Respect is an important cultural value within Kenya.

"We are trained as surgeons to respect the patient. From the time you meet the patient, there is need for us to give the patient the utmost respect…we should be the servant of the patient." Key informant faculty -1 (KIF-1).

"I think that respect should not only be junior-senior but between different cadres, for example doctor-nurse, doctor-physiotherapist, and even doctor –cleaner. Because that is something we see in other facilities, most often there is always that respect which I can say in our facility is not totally up there." FGD Registrars Group 1 (FGD R-1)

"*In the African culture, one is expected to respect his seniors."* FGD R-2

"*Consideration for colleague; that is a cultural thing that should be taught in the house, unfortunately the home is breaking down." FGD Faculty Group 2(FGD F-2)*

Respect was mainly defined as acquiescence to age and position, with a demand for a two-way reciprocal respect among health care workers as well as for patients. From those who are senior, it is seen as juniors respecting them, while for the juniors and those of other cadre it should be both ways.

"Respect to seniors has always been part of what we practiced while young by giving away seats, being corrected by older neighbours. In school, this is seen in students respecting their teachers as well as older nurses and older patient in the ward." (KIF-2)

For patients, being a servant means serving the interest of the patient as a person, answering their questions and being available. It also means that in surgery for example, the patient needs to be respected when obtaining consent.

"They are good because when I call them to ask a question, they answer me, and are available when I ask for them." KIP-1

Participants often commented that though this concept is reported to be important, it was often not practised by those whom they saw as role models. This is reflected in the following examples of negative responses. It is important to notice that the nuances given here by those who are junior are mostly in the negative aspects; what they aspire to see practiced by their senior colleagues but fail to see.

"*Professionalism will require some degree of respect. I agree that I may be not as learned as you, but I am still a man, I am a human being. There is a certain level of respect that one should be accorded regardless of status." FGD Auxiliary Group 1(FGD A-1)*

"*Respect one another in that you are not rude to the other doctor. If a doctor, for example, has made a mistake publicly, I feel it's nice that you call that doctor aside and talk to them, as opposed to embarrassing someone."* FGD R-3

"*The senior should not yell and shout and embarrass fellow colleagues in front of patients; I think part of being professional comprises respect." FGD Medical student group 1 (FGD M-1)*

The senior colleagues also shared the same nuances in their argument, indicating lack of respect for the professionals. The other nuances included treating others humanely.

The other aspects of respect were the lack of respect in the way doctors are treated by those in authority, either by way of lack of recognition of their efforts, or minimal remuneration leading to brain drain.

"*Look, I have been training doctors here for the last 35 years. They qualify but after that, 50% of them have gone out … they are paid money that cannot [meet basic human needs]… not*

only money , they are not recognized and respected… I would have expected us to be having engineers who stand side by side with the Chinese engineers , so that when the Chinese help is gone, we can build the next road ourselves, but we have lost the people we trained , and we are losing doctors the same way." (KIF-2)

Some of the reasons given for the above was either cultural background, or by virtue of the training as well as upbringing. The cultural background and the upbringing are demonstrated above. In an individual interview, a senior mentioned that respect for the patient was something learned from the way he was taught from the western culture influenced by the Hippocratic Oath.

"*You know first of all you must realize that we are orthodox, western-trained physicians, and therefore ...as we train doctors, in our orthodox process, we are guided by the Hippocratic oath, and I think from my own perspective, the most important aspect of the Hippocratic oath is the patient." (KIF-F1)*

Some of the reasons given include respect of the patient especially based on religious views.

"The patient's body, spiritually, is the temple of the holy spirit. For us as surgeons, we really must respect it, because the patient has given us that authority, and we should [respect] the body." KIF-F1

The other traits mentioned include empathy, honesty, humility and integrity. Some of these traits could fit other themes like excellence in service; for example those who demonstrate integrity and honesty will be perceived by patients to have excellent service. These character traits are not just directed to patients but to colleagues as well.

"I think professionalism is doing work in an honest manner, especially being empathetic to the plight of people you're working with." FGD -M2

"Well, for me it's about honesty and integrity because for a surgical patient, usually most of them are at your mercy so you need to be honest with them in terms of whether you are capable of handling whatever illness they have." (FGD-R1)

"Though I know it is a bit difficult, but we should also accept and admit our mistakes [when we go wrong], that is humility, and that is called professionalism." (FGD-R2)

"*The softer [skills] like are you behaving well, etiquette, having good work ethics, and consideration for fellow colleague." FGD-F-1*

All the sources mentioned some respects from different perspectives – students, auxiliary staff and senior consultants as seen from the excerpts above.

2) Ethical values concerning patients

The participants also responded that professionalism should include ethical values when one is taking care of the patient. This was expressed regarding patient rights, skills to care for the patient in the particular area of speciality, and justice towards patients. It was repeatedly mentioned by participants that ethical behaviour in medical practice is also a fundamental concept of professionalism, where ethics is following guidelines provided by the institutions and the board. Further, the participants repeatedly stressed a need to follow guidelines and regulations from the Kenyan Medical Practitioners and Dentists Board, which outline an ethical code of conduct for doctors. Examples of responses that follow this theme are given here:

"*Professionalism to me is understanding and applying the principles of ethics in your conduct with your colleagues and patients." FGD R-1*

"*Thinking about adhering to the rules and regulations of the institution." FGD Auxiliary Group 2(FGD A-2)*

"*Professionalism is like values and standards that somebody who is in the medical field is expected to have and abide by whenever he is dealing with people."* FGD F-2

Professionalism was not depicted in this theme just as following guidelines, but also treating people by following one's conscience; doing the right thing at the right time, and treating patient with equality regardless of their socio-economic status.

"In my view, what comes to my mind is [doing]what is supposed to be done and you actually follow it through, not necessarily the text book kind of procedure, but [also] your conscience; because I believe there are some things a surgeon can do or does that even in his conscience he knows is wrong, so [in such situations] if you can balance the knowledge and your conscience and do the right thing to the patient at the right time, [it would be professionalism]". KIF-2

"I think part of professionalism would be not compromising on standards in relation to what we would term as an economic classing of the patient such that a patient who can pay more receives better care than a patient who can't afford it because in that sense you [discriminate against the patient if you] compromise on the standards by which you are delivering the health care to the patient." FGD-F1

"I think professionalism is where you combine taking peoples skills and move it together with ethical values and societal value." FGD-M

"The rights of the patient have to be adhered to. There is also the rights of the doctors, so the doctors should actually know their rights and patients' rights." FGD-M

Maybe if you are dealing with [my colleague] was saying, with your fellow professionals like the nurse, or radiologists, or radiotherapists, you shouldn't overstep their boundaries that are within professional limits. Like maybe, some people can overstep such that they get too personal or start laughing in the wards." KIF-F

"You [as a doctor] don't treat one [patient] better just because the patient is from the same tribe or you know he is a neighbor or something, all of them are sick and all of them should be treated equally." FGD-R1

3) *Excellence in service*

The theme of excellence in service includes some of the concepts of concern as well as character, but as it is used here it refers mainly to the quality of service given together with a humanistic handling of the patient. The 'bedside manner' as it has been referred to, should include an approach to open communication with the patient. Doctor-patient and doctor-doctor

interactions were recorded as requiring mutual respect, but the study participants also recorded communication as a major component of professionalism.

Correspondingly, informed consent was frequently reported by participants as a surgical task that should be performed well. However, many participants reported that it was often performed poorly, if at all. It was noted by participants that the consent should include both explaining to the patient the nature of their illness, as well as a respectful manner in the way in which it is explained

"*If I am taking a patient to the theatre I will have to talk to the patient about their condition, make them understand it, find out if they have understood it, explain to them about the complications in a way that they understand in an empathetic way."* FGD R-2

Respondents also noted that an improperly performed consent process was a lost opportunity for role modelling professionalism. This comment was repeatedly reported by faculty, nurses, students as well as patients.

"The *patient should give the doctor informed consent. Well, the reason why it is informed is that the doctor should inform the patient what they want to do, but most of us just tell the patient "can you sign here?" Are we allowed to do the operation, yes, just sign here, without explaining to the patient what are the consequences of that and so on?"* KIF-2

"A patient who had a terminal disease was told by another doctor, "You are not going to live; you will die after ten days." Then after ten days the patient was still alive. From the patient's side, the statement from the doctor seems harsh and uncaring. The way of explaining is the difference, some people can tell the patients in an indirect way in which they can be satisfied." FGD R-2

"I do not know the nature of my illness till now, they mentioned a word during a round check but not to me." KIP-2

The following are examples of other concepts less commonly reported by study participants: honesty, morality, integrity, and empathy.

"I think I'd like to put it this way, I'd like to talk about three things: first of all the attitude, the [moral] behavior and the context of relation, where in this instance the context is an illness that has brought a patient to a doctor, and behavior is how one conducts themselves in relation with the patients. The relationship should embody societal values and those we acquire as we mature. How do you really understand this person? Are you able to feel what, what the patient is feeling?" KIF-4

The mode of service delivery and whether it included integrity, honesty, compassion, empathy and responsibility were also reported as a component of professionalism.

"I think for me professionalism is about delivering quality care. That you put the patient first. In order for you to do that, you must have integrity, because there is no way you are going to do this without integrity; you cannot separate the two issues. So if you put your patient first and you want to provide the best possible care for that patient then you have to do it within the ethics that govern the profession." FGD F-2

"Mine may come from a different level of thought, maybe from what we are saying, that we should be empathetic, kind, gentle, humble, all those good traits." FGD R-3

Professionalism was also noted to include accountability, time keeping, dedication, commitment, and availability of the doctor; accountability not just to patient but to the colleagues and to the society.

"For me, I look at it in terms of commitment to deliver, and accountability to the people who are receiving your services, as well as accountability to the people in the profession, so that if I am expected to deliver a certain category of service, in this case to the patients and of course to our students, we teach them, it should be that I have that commitment to deliver that service to the recipient, and at the same time to remain accountable to my colleagues so that they can also assess what I am doing , and say I have done what is expected of the profession in the circumstances that I found myself." FGD F-2

"We call have common courtesy that you extend to a human being in general, so, for example, timekeeping, keeping your word." KIF-6

Though it appeared by the responses given that many participants understood the various components of professionalism, the responses also reflected a significant gap between that understanding and the actual surgical practice they experienced or were a part of.

"Sometimes doctors are missing in action, probably because they are busy chasing greener pastures elsewhere. So I think sometimes doctors are not disciplined, and that is not professional, or they offer to do procedures, and they know that whatever they are doing does not even add the quality of the patient's life, but they just do it because they think there is money to be minted. So, I think a good doctor is disciplined." FGD M-2

The availability of doctors in the above quotation is rendered in the negative form by the students because this is what they see, and at times miss classes or tutorials because of the same.

"*Reliability is that I can come to you at any time or any occasion and expect a certain level of care, and I will not expect next time to find you moody; you will not be talking or the other time you will not even…"* FGD A-2

"Dedication to your work; you do not want to say you are a doctor practicing medicine when half the time you want to be concentrating on other things. Maybe you want to do your farming in the village; if you want to be a doctor, just be a doctor. That is professionalism." FGD F-2

"In my view, a good doctor is, once a patient is admitted to a ward, comes and checks regularly, even it can be twice a day." KIP-2

The patients, students, nurses and surgical teachers/faculty were in agreement that a physician should have good clinical skills and knowledge. Many participants reported this as an essential component of professionalism for a surgical career.

"In theatre, you have to do the best possible, and that is why you have to have training which prepares you for that. When you are in the theatre, you are practically alone with your patient who can't answer your questions. You can't ask the patient, "Can I cut here? Shall I remove this or that or the other one?" KIF-2

"*A good doctor is one who can diagnose my problem and treat me well.*" KIP-2

"*But I think for me first and foremost you must be some qualified personnel for that particular field of profession, in this case, you must be qualified in a recognized university."* FGD A-2

Many study participants reported dedication because of the demand that surgical operations often require. Similar to this concept, it was also reported that professionalism should include the concept that surgery as a vocation is more of a 'calling' and not just a career. The level of commitment in medical profession is seen as going the extra mile. More often than not, it will require one to work beyond the official hours compared to other professions.

"W*e have been trying to run away from the fact that the medical profession is slightly different from the other professions. Because in the other professions I come to work at 8 am and leave at 5 pm, but in the medical profession there is that additional aspect that people say it's supposed to be a calling where you go an extra mile other than just doing your routine work*…" FGD R-3

"*Should keep the patients first before anything else; avoid things like the striking and all that."* FGD A-1

Some participants were concerned that some colleagues do not refer appropriately and are not forthright with the patient even when they experience difficulties during the course of their work.

"If you had a difficult case, and you see the patient is bleeding after you have done an operation, get somebody else to look at the case for you. That is the best thing to do.
It doesn't mean you are stupid, it happens, but our people are not doing so, and people are dying, even reasonably senior people." (KIF-2)

Some study participants mentioned grooming as part of professionalism.

"Professionalism should also entail the doctor's etiquette, his mode of dressing and his attentiveness. Is he paying attention to the patient, is he using his phone when the patient is talking to him?" KIF-9

In summary, the surgical community thought of professionalism around ethical values, character of the individual doctor and the excellence in services as the themes, but also had particular traits they thought in combination with the themes constituted what professionalism would be. They seemed to lay emphasis one of the societal values, respect, as one of the core areas by the number of mention and nuances that were elaborated above.

4.1.2. Survey results: The concepts of professionalism among the surgical community in the University of Nairobi

The purpose of the survey was to establish how the concepts are distributed among the surgical community. A questionnaire with 19 items was designed. The four items that were not included were; good work ethics, ethical boundaries on the understanding that the meanings were covered in commitment, dedication. Responsibility was included with integrity. Do no harm was combined with loyalty to patient, on the basis of the understanding that anyone who is loyal to patient will do no harm.

Of the 250 questionnaires sent out, 188 were completed (75% response rate).
The frequency of the responses to the 19 attributes of professionalism on the survey is summarized in Table 7.

The two items most frequently chosen by the participants as the important reflection of what professionalism is were respect, knowledge, and skills of the doctor's chosen field. This is demonstrated by the fact that they both achieved the highest score by the participants who strongly agreed. Empathy and dedication to career were reported as the least valuable items in professionalism. Ten of the 19 items were given a rating of 'strongly agree' by a majority (over 60%) of survey respondents (Table 7). All the items were responded to by participants, except on commitment and honesty where one participant did not respond to each item.

However, some the professionalism attributes previously mentioned through the FGDs and interviews were not strongly agreed to as professionalism attributes by survey participants. 0.5% - 2.1% of respondents reported 'strongly disagree' on 11 of the 19 items. For the total 19 attributes listed, between 1.1% to 10.6% of respondents reported 'disagree' with the importance of that attribute toward professionalism in a Kenyan context.

Table 7: Frequency and mean scores of responses to aspects of professionalism during the survey.

n=188	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)
Respect of patient and colleague	74.5	22.3	2.7	0.5
Having sound knowledge and skills in that field	71.3	28.2	0.0	0.5
Being loyal to patient/Do no harm	69.7	29.2	1.1	0.0
Keeping the standard and quality of care	69.1	26.6	4.3	0.0
Upholding the right of the patient and doctor	68.6	27.7	3.7	0.0
Integrity and responsibility	66.5	31.4	2.1	0.0
Commitment to work as a doctor (n=187)	66.3	28.9	3.2	1.6
Treating the patients, the same without discrimination/ equality	64.4	33.0	2.6	0.0
Good interaction between doctor and patient and doctor –doctor/health care workers	63.3	31.4	4.3	1.0
Accountable to patient and other doctors	60.1	34.6	4.3	1.0
Etiquette	57.4	39.4	2.7	0.5
Keeping time as a doctor	54.3	33.0	10.6	2.1
Justice	54.3	42.0	3.7	0.0
Availability for patients and students	52.1	38.9	7.4	1.6
Humility	52.1	39.4	8.5	0.0
Keeping societal values	50.5	45.2	4.3	0.0
Being Honest to client /owning to one's mistakes (n=187)	49.7	43.9	5.3	1.1
Empathy	41.5	53.2	5.3	0.0
Dedication to patient /putting patient first above one's needs	41.0	48.4	10.1	0.5

As seen in table 8, there is high level of agreement, with only two items falling below 90%. Some students (registrars and medical students) either disagreed or strongly disagreed that respect defines professionalism (Table 9).

There was statistically significant correlation between gender and upholding patients' rights, dedication to one's work as a doctor, and commitment as concepts of professionalism (p=0.035,

0.012,0.033 respectively, Pearson r) (Table 11). There was no significant correlation between the cadre and any of the concepts of professionalism on bivariate analysis with Pearson r test (Table 11).

Table 8: **Aggregating the participants' responses into agreeing and disagreeing by response to various aspects of professionalism**

n=188	Agree (%)	Disagree (%)
Respect of patient and colleague	96.8	3.2
Having sound knowledge and skills in that field	99.5	0.5
Being loyal to patient/Do no harm	98.9	1.1
Keeping the standard and quality of care	95.7	4.3
Upholding the right of the patient and doctor	96.3	3.7
Integrity and responsibility	97.7	2.3
Commitment to work as a doctor (n=187)	95.2	4.8
Treating the patients, the same without discrimination/ equality	97.4	2.6
Good interaction between doctor and patient and doctor – doctor/health care workers	94.7	5.3
Accountable to patient and other doctors	94.7	5.3
Etiquette	96.8	3.2
Keeping time as a doctor	87.3	12.7
Justice	96.3	3.7
Availability for patients and students	91.0	9.0
Humility	91.5	8.5
Keeping societal values	95.7	4.3
Being Honest to client /owning to one's mistakes(n=187)	93.6	6.4
Empathy	94.7	5.3
Dedication to patient /putting patient first above one's needs	89.4	10.6

Table 9: Response to respect item by cadre

	Consultant	Registrar	Medical student	Auxiliary Staff	Patient	Total
Strongly disagree	0	0	1	0	0	1
Disagree	0	1	4	0	0	5
Agree	3	6	25	5	3	42
Strongly agree	25	21	70	19	5	140
	28	28	100	24	8	188

More females than males disagreed, with one strongly disagreeing that respect is a concept of professionalism (Table 10). Pearson Chi-square was 2.899 (p=0.407)

Table 10: Response to respect item by gender.

	Female	Male	Total
Strongly disagree	1	0	1
Disagree	3	2	5
Agree	17	25	42
Strongly agree	51	89	140
Totals	72	116	188

Increasing age of the participant was correlated with respect, equality, integrity and responsibility (p=0.003. 0.044, 0.009 respectively) (Table 11). The number of years a health care worker participant had been employed in the institution had a statistically significant correlation with respect, equality, and accountability (p=0.043, 0.024, 0.01 respectively; Spearman rho) (Table 11).

Table 11: Correlation of concepts of professionalism items with age, cadre, gender and number of years participants have been at the institutions.

n=188		Gender	Cadre		Age	Years
Respect	Pearson r	0.1	-0.084	Spearman rho	.218**	-.148*
	p Value	0.172	0.254	p Value	***0.003***	***0.043***
Empathy	Pearson r	-0.018	-0.004	Spearman rho	0.067	-0.058
	p Value	0.806	0.957	p Value	0.361	0.427
Values	Pearson r	0.101	0.096	Spearman rho	0.034	-0.037
	p Value	0.169	0.191	p Value	0.645	0.612
Skills & Knowledge	Pearson r	0.057	0.069	Spearman rho	-0.002	0.014
	p Value	0.438	0.347	p Value	0.974	0.851
Justice	Pearson r	0.065	0.046	Spearman rho	0.054	-0.067
	p Value	0.376	0.532	p Value	0.462	0.361
Do no harm	Pearson r	0.099	-0.022	Spearman rho	0.11	-0.133
	p Value	0.176	0.764	p Value	0.133	0.069
Upholding rights	Pearson r	.154*	0.02	Spearman rho	0.095	-0.1
	p Value	***0.035***	0.788	p Value	0.193	0.173
Equality	Pearson r	0.029	0.009	Spearman rho	.147*	-.165*
	p Value	0.693	0.9	p Value	***0.044***	***0.024***
Communication	Pearson r	0.034	0.054	Spearman rho	0.028	-0.029
	p Value	0.638	0.462	p Value	0.708	0.689
Quality of care	Pearson r	0.073	0.019	Spearman rho	0.092	-0.054
	p Value	0.321	0.792	p Value	0.211	0.46
Commitment (n=187)	Pearson r	.183*	-0.04	Spearman rho	0.073	-0.073
	p Value	***0.012***	0.583	p Value	0.322	0.323
Accountability	Pearson r	0.116	-0.113	Spearman rho	0.123	-.187*
	p Value	0.113	0.123	p Value	0.092	***0.01***
Dedication	Pearson r	.155*	0.098	Spearman rho	0.074	-0.063
	p Value	***0.033***	0.18	p Value	0.31	0.392
Honesty (n=187)	Pearson r	0.109	0.034	Spearman rho	0.103	-0.083
	p Value	0.136	0.643	p Value	0.161	0.257

n=188		Gender	Cadre		Age	Years
Integrity and responsibility	Pearson r	0.133	-0.041	Spearman rho	.189**	-0.115
	p Value	0.069	0.579	p Value	***0.009***	0.116
Humility	Pearson r	0.007	0.016	Spearman rho	0.021	-0.042
	p Value	0.926	0.831	p Value	0.777	0.57
Keeping time as a doctor	Pearson r	***0.048***	0.062	Spearman rho	-0.128	0.079
	p Value	0.513	0.397	p Value	0.081	0.28
Etiquette	Pearson r	-0.006	-0.068	Spearman rho	-0.064	-0.09
	p Value	0.934	0.352	p Value	0.386	0.22
Availability	Pearson r	0.002	-0.032	Spearman rho	-0.092	0.062
	p Value	0.983	0.665	p Value	0.211	0.397

Key:

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Factor analysis is a statistical model for determination as to whether variations in observed responses have similar patterns because of unobserved variable, which is called factor. Each factor will capture an amount of overall variance in the observed variable, and those that capture the list variance are discarded. The amount of variance explained by a factor is denoted as Eigen value. The relationship of the observed variable to the underlying factor is the factor loading, which is similar to standard regression coefficient.

In analysis of the items, we choose factor analysis which helped in identifying the 'organizing principle' behind the items. In factor analysis, a number of results are obtained, the most important products of the analysis are explained in the following paragraphs.

Kaiser-Meyer-Olkin Bartlett, the measure of sampling adequacy for factor analysis, was 0.924 ($p = 0.000$), meaning that the sample is statistically adequate to perform a factor analysis. This however does not in any way offset the fact that the response rate was 91% of the expected sample size and 75% of the distributed questionnaire. The reliability and consistency of how closely the items are related among the items showed a Cronbach's α of 0.927, implying

excellent internal consistency of the various items. Three factors had Eigenvalues greater than 1, meaning there were three underlying factors for the 19 items. Factor analysis was used to further explore the hidden organization of the 19 items to the lowest common factors. This expanded the view of how the items are oriented, further explaining how the items are organized around the factors. The result was three underlying factors which accounted for 61.2% of the variance, most of which was accounted for by one factor – excellence in service (49.2%) The loading of items indicated the following factor structure (Table 12).

Table 12: Factor loading, Eigenvalues and percentage variance of the three factors loaded by twenty items of professionalism matched to ABIM (American Board of Internal Medicine) domains.

	Excellence in service	Patient oriented	Character in practice	ABIM
Empathy			0.618	Respect
Respect			0.484	Respect
Societal values			0.848	Respect
Equality			0.402	Honour
Having sound knowledge and skills in that field		0.923		Excellence
Justice		0.532		Honour and integrity
Being loyal to patient /do no harm to the patient		0.693		Accountability
Upholding the right of the patient and the doctor		0.597		Honour and integrity
Communication	0.579			Excellence
Keeping the standard and quality of care	0.507			Duty
Commitment to work as a doctor	0.654			Duty
Accountable to others	0.705			Accountability
Dedication to patient/ putting patient first above one's need's	0.646			Altruism
Integrity and responsibility	0.799			Honour and integrity
Being honest to client	0.762			Honour and integrity
Humility	0.661			Accountability
Etiquette	0.511			Practice habit
Keeping time as a doctor	0.791			Excellence
Eigen Values-Total	9.4	1.3	1.02	
% of Variance	49.26	6.60	5.36	
Cumulative	49.2	55.86	61.23	

The first of the three outstanding factors – excellence in service – consisted of good interaction between doctor and patient and doctor to doctor, keeping the standard and quality of care, integrity and responsibility among others. Most of the items that load into this factor fit into the theme of excellence in service that is depicted by the qualitative data. The reason why not all items fit in the factor is because one of the limitations of factor analysis, given that it works with mathematical covariates, is that it can at times be ambiguous (228). Factor 1 has the highest number of items strongly correlating with integrity and responsibility, indicating that service provision requires integrity and responsibility.

'Factor loading' is an indicator of how strongly or weakly each factor (or what was called the organizing principle) is related to the items. Loading below 0.5 is not useful in describing the factor. The second factor comprised justice, patient rights and doing no harm to the patient, among others. Majority of the items fit into the qualitative theme of ethical values in patient care, but can be best defined by having sound knowledge and skills in that field item. Factor 2 is strongly correlated with skills and knowledge.

Lastly, the third factor included keeping societal values and empathy that fits personal character. Respect and equality, though included, do not strongly associate with this factor as demonstrated by a loading factor of less than 0.5. Factor 3 is strongly correlating with societal values, indicating that this group belong to societal values, of which from the qualitative phase, respect is a strong societal value.

The third factor is the one most closely in agreement with the respect domain in ABIM's list, while that of the second factor is closely tied to the concepts of excellence, accountability, and honour in ABIM's list. The first factor has a mixture of duty and honour, and contains practice etiquette which is not an integral part of the ABIM domains of professionalism.

4.2 Perception of teaching professionalism

This objective set out to establish how the participants perceived medical professionalism is taught or learned at the University of Nairobi. Participants gave different opinions as to the methods employed to teach professionalism. From the 16 focus groups and 10 individual interviews, participants gave varying opinions regarding methods employed to teach medical professionalism. They gave 13 methods on how they thought professionalism is being taught or learned at the University of Nairobi.

Table 13: Methods of teaching professionalism as viewed by participants

Method of teaching professionalism	Number of times mentioned by participants
Role modelling	83
Formal curriculum	37
Observations	24
Mentorship	20
Apprenticeship	10
Learning from social network	8
Discipline	7
Parental guidance	7
Regulations	5
Media	4
Religion	2
Reading material	1
Peers influence	1

During analysis of the qualitative data, the following themes emerged that comprised associated concepts (Table 14).

Table 14. Emerging themes on how professionalism has been taught at the University of Nairobi

Themes	Component concepts
Apprenticeship	Role modelling Observation Apprenticeship Mentorship Discipline Regulation
Socialization	Social Network Peers Religion Media Parental guidance
Formal learning	Reading material Formal curriculum

The following excerpts and explanations further illustrate the above themes and concepts.

1. Apprenticeship

Most people mentioned apprenticeship through observation, working with seniors and as some have suggested, professionalism is 'caught' not taught by watching role models. It points to the power of role modelling as is illustrated by the following statements:

"*I think I usually just see our seniors, how they do things, and even if you are like a hard-core I think after staying in a medical school for a long time you actually get those habits which your seniors or your leaders are practicing, so although there might be some differences overall our picture as doctors in Kenya is the same."* FGD R-1

However, role modelling may also be unreliable because of the increased numbers of students with few teaching staff and the changing societal values. The societal values form the tapestry

from which behavioural traits such as professionalism can be learned. This, of course, breeds informal and hidden curriculum within an environment.

"So, if you say you should be in the wards by 0730hrs. I will come at 0730hrs the first week, the second week, but if I see my senior is not coming at 0730hrs and he is coming at nine why should I stress myself to come at seven?" FGD R-3

"*If you have a group of five students, allocated to one teacher and they are followed to the wards, they learn a lot about medicine and how to conduct one's self as compared to here where we are 50 to one. Most students just daydream most of the time, they are on the phone."* FGDA-1

"I think what one of my colleagues had mentioned about yesteryears when we had role models, I believe that we have not stopped being role models, I think our values as society have changed, so what we are modelling may not be desirable in terms of professional behaviour, we are modelling people who as my colleague says can't work, so we are still modelling." FGD F-2

It was noted that some teachers can openly build on hidden and informal curriculum as they show the opposite of how they want students to behave.

"There is a consultant I met in one of the wards; he was telling me to put on a tie. He did not have a tie; he did not have a lab coat. I almost asked him who are you. He did not look like a doctor, and he tells me to dress like one. I thought that maybe he was not a good role model to me and maybe he had no right to tell me to dress like a doctor while himself he was in some fancy shirts that youths put on, so I wonder is that the kind of role modelling that we are supposed to see…." FGDM-7

Regulation was also mentioned as a form of inculcating discipline by some members of the surgical community at the University of Nairobi. The student felt that it is a way of emphasizing what is important.

"Because you can naturally be lazy but I think we learn through adaptation, in fact in classes I used to attend when I joined paediatrics the classes used to be at 7:30 on the dot, you get there later they lock you out. I adapted, I got to class at 7:00 am." FGDM-1

Mentorship was also one of the ways in which people have learned professionalism, as was mentioned by the seniors as well as students.

"*Mentorship is vital in the [teaching of] professionalism." KIF-F4*

2. Socialization

Social factors in teaching that were mentioned were parents, peers, religion, and the media. There was a feeling that morals are decided by society; by and large it is the community who will be teaching the trait of professionalism.

"Being honest, being kind, being empathetic those are things that you also learn from other quarters like our religious background, our families' upbringing and all that, so it is not something that I think you are taught, its over time" FGDM-6

"Yeah that is what I wanted to point out that character building starts from childhood, so the individual present here, is the person from childhood and the way they've been brought up, and the influence of peers" FGDM-2

3. Formal learning, reading from literature and media

There are some formal classes on ethics that begin in the second year of the undergraduate programme, but they are soon forgotten. Furthermore, they are taught by non-medical people who are not available to be role models of what they teach.

"The teachings on ethics are very disjointed; they are given by people who are not even with us here, people who are outsourced. It does not make impact on these [the students] because at postgraduate level it is zero." FGD F-1

"We said one of the ways in which we learn professionalism was in the second year, we did a topic: medical ethics; but then personally the class was too much of law things… it was more of cramming everything, there is no understanding." FGDM-6

Some thought because professionalism is enmeshed with societal values, teaching at medical school formally may not really help.

'As human beings, I think we are hard-wired to role model, what we need to realize is what we are seeing is symptoms of the societal culture creeping into our profession, and I think we may be foolish in thinking that we may change that by having a course at the university, I believe that it is a deeper problem.' FGD -F2

Media and books were also mentioned as ways that students who pass through the medical school of the University of Nairobi have learned professionalism.

"Read from various sources on the internet like maybe medical law and ethics; we can also get a few details concerning professionalism." FGDM-2

"I am not sure about the rest of us, but I learnt professionalism tactics from [a Television(TV)] series; medical TV series, cause they give you a different perspective from what we see here so I just thought I should mention that I admire the way they [behave] , even if they are acting, it but still I feel you can learn." FGDM-2

"*What we read, the books as any paperwork, material from the net."* FGDM-3

In summary, the participants thought that it is through apprenticeship, socialization and some form of formal learning methods that medical professionalism is being taught. The formal curriculum is haphazard and does not run throughout the course, hence lack of awareness on medical professionalism. Because of the inadequacy of both the formal curriculum and apprenticeship, media and social circles outside the medical school acts as sources of information on medical professionalism.

4.2.1. Results of the survey of the methods used to teach professionalism at the University of Nairobi.

From the finding of the qualitative data, a tool was generated and piloted and then summarized as the final survey tool (Appendix7). This tool was only distributed among students, lecturers and health care workers (n=180). The median age of respondents was 31.1 +/-9.6 years with a male to female ratio of 1.6:1.

Some participants did not answer all questions in all sections of the questionnaire. Formal curriculum as a method of teaching professionalism at the University of Nairobi had the highest number with only 4 abstaining (Table 16). Most participants (151/175) agreed that apprenticeship has been the way in which professionalism has been taught at the University of Nairobi. Media that include television series, the internet, and literature seemed to be the least source of how participants have learnt professionalism with only 8.0 % strongly agreeing while another 47.4% agree (Table 16). The highest rated methods were apprenticeship, formal curriculum and regulation (Table 16).

There was no statistically significant correlation between all models of teaching professionalism at the University of Nairobi and cadre (Table 15). In almost every cadre, there were equal proportions of those who agreed and those who disagreed.

There was statistically significant correlation of age and media as a way of teaching, with the younger in age mentioning media as a form of teaching (P=value 0.014) (Table 15). The younger participants were likely to agree with this idea than the older participants.

More consultants and those who have been in the institution longer agreed with apprenticeship, and disagreed with other modes, while more students (undergraduate and postgraduate) agreed with media and regulation as methods of teaching.

Table 15: Correlation of the teaching method of professionalism and age, gender, cadre and year one has been at the institution

		Gender	Cadre		Age	Year
Apprenticeship (n=175)	Pearson r	-0.094	.080	Spearman rho	0.065	0.071
	p value	0.211	0.286	p value	0.385	0.342
Media(n=175)	Pearson r	0.060	-0.036	Spearman rho	-0.183*	0.082
	p value	0.427	0.631	p value	***0.014***	0.272
Regulations(n=175)	Pearson r	-0.005	0.037	Spearman rho	-0.014	0.067
	p value	0.943	0.625	p value	0.851	0.370
Socialization(n=172)	Pearson r	-0.072	0.006	Spearman rho	-0.060	0.052
	p value	0.335	0.933	p value	0.423	0.485
Formal curriculum(n=176)	Pearson r	0.016	-0.036	Spearman rho	0.042	0.060
	p value	0.836	0.630	p value	0.579	0.425

Table 16: Results of survey on teaching methods of professionalism at University of Nairobi

	Frequency				Aggregation	
Survey n=180 Methods of teaching	Strongly agree %	Agree %	Disagree %	Strongly Disagree %	Agree %	Disagree %
Apprenticeship(n=175)	41.2	45.1	9.7	4.0	86.3	13.7
Formal curriculum(n=176)	38.1	49.4	9.1	3.4	87.5	12.5
Regulation (n=175)	22.3	58.9	14.8	4.0	81.2	18.8
Socialization(n=172)	10.5	47.1	36.0	6.4	57.6	42.4
Media(n=175)	8.0	47.4	39.5	5.1	55.4	44.6

The items showed internal consistency with Cronbach's alpha of 0.942 and a significant Kaiser-Meyer-Olkin Bartlett's test of 0.905. The items coalesced around two factors: literature-based learning (media and books) and apprenticeship – discipline, mentorship and societal values (Table 17). Together, the factors accounted for 89.1% of the variance with factor 1

being the highest. All items were significant contributors to the factor as demonstrated by high factor loading of over 0.7 by the items, media items being the least in defining literature based model of teaching professionalism (Table 17).

Table 17: Eigenvalues Factor loading of the two factors by five items on how professionalism has been taught and learnt in the University of Nairobi

	Factors		Eigenvalue	
	Apprenticeship	Literature source		% Variance
Discipline and regulation	.843		2.0	
Role modelling, observation, apprenticeship	.826			81.8
Social networks, peer, religion, parents	.663			
Formal curriculum		.898	1.17	
Media/Books		.761		7.3

4.3 The challenges that face health care workers at the University of Nairobi as they teach and practice professionalism.

This objective set out to find the challenges confronting the surgical community at the University of Nairobi and Kenyatta National Hospital in the teaching and practice of professionalism. Because of the need to find out the prevalence of the challenges and trend of the practicing physicians, the legal representative of MPDB was interviewed as a key informant.

4.3.1. Qualitative findings

Qualitative data was collected from the residents, ancillary staff, medical students, faculty and the representative of MPDB, with the results as presented below:

Table 18: Challenges perceived by the participants

Challenges as perceived by participants	Number of times mentioned
Poor attitude or character	136
Lack of proper mentorship	69
Inadequate and disjointed formal teaching and assessment	49
Institutional culture does not support professionalism	13
No disciplinary measures against those who err	32
Inadequate remuneration	77
Lack of resources	45
Increased workload: very low physician to patient ratio	25
Increased workload: very low faculty to student ratio	21
Poor communication between colleagues and with patients	24
No recognition of work done by the doctor	1
Societal pressure, culture of respect to the rich	2

Three themes emerged during the analysis of the qualitative data concerning challenges facing the practice and teaching of professionalism.

Table :19. Emerging themes from the challenges facing the practice and teaching of professionalism in University of Nairobi

Themes	Sub-themes
Personal character	Poor attitude or character
Institutional issues	Lack of proper mentorship Inadequate and disjointed formal teaching and assessment Institution culture does not support professionalism No disciplinary measures against those who err Poor communication between colleagues and with patient Increased work load: very low physician to patient ratio Increased work load; very low faculty to student ratio No societal recognition of the doctor Culture of respect for the rich
Inadequate resources	Inadequate remuneration Lack of resources

These themes are illustrated and elaborated using the quotes from the participants below.

1. Personal character

The majority of participants felt that the main challenge to the practice and instilling of professionalism is the character of the health care providers. The attitudes are perceived in the way providers view and interact with patients who come to the public hospital. It is also seen in the way the surgeons are not able to make themselves available to the patient postoperatively. This attitude affects the health care worker's availability, accountability, and responsibility, and this speaks of character.

"*The challenges are; lack of availability, irresponsibility, lack of accountability; all those are the things that make talks about character." KIF-8*

The character of a health care worker is demonstrated in the way the doctors interact with their patients and their students.

"You are employed here to be here from morning to evening, you have a duty rota, you have contact time on your daily schedule, there are times when you are not supposed to be anywhere

else in particular. You have times you have said you want to see students: they come; they find you are not here, you are on call this week and they can't find you in the ward. How can you teach professionalism when you are not doing professional practice? There is a disconnect between knowledge and practice." KIF-10

There are times when there is a mixture of character that depicts the caregiver or the teacher as in need of fiscal prosperity above all else.

"The lecturer has told the student that once she was to go for a class to teach, but then there was a call from a certain hospital to go and do a specific surgery which she liked, so she chose to go there than to teach." FGD M-4

When this is done, again and again, it becomes a habit and part and parcel of the institution's culture; it perpetuates corrupt morals.

"We are just used to corruption everywhere wherever you go; it is really not a big deal, and it translates into everywhere in the hospital, we do not take anything seriously whether it is financial controls or emergency procedure, and it affects everyone: nurses, cleaners, theatre staff and doctors "FGDM-3

It affects the way we communicate with patients as well with colleagues.

"*They do not have the time or ability, you know, to sit and listen to you. Some also don't have the capacity to listen to the patient, and to be patient and explain to them their story, some people are short tempered; they get annoyed over small things."* FGDM-6

The key informant interview with the Medical Practitioners and Dentists Board representative reveals communication with the patient to be the main problem.

"*Most of the things which cause patient complaints are basically a lack of communication between the medical personnel and the patients, because from what we can see, if medical personnel from doctors to nurses take a bit of time to explain to them what they are doing, what kind of treatment they are prescribing, some of these cases would not be here."* Key informant interview, MPDB.

The explanation was that patients now have information access and may know what ought to be done, hence the increased number of complaints to the board about doctors. The average number of complaints was 56-70 in a year, and with an increasing trend.

"*There is now information access, there is Google, somebody has already googled the treatment they are supposed to get, then they go to a doctor, and the treatment they get they say, No, it is meant to be this." Key informant interview MPDB*

According to the legal representative of the board, a trend of increase of complaints has been noted from 2010. It could be because of the health section of the constitution that included right to access highest standards of health. She also said it could be because of increased literacy. Most of these complaints are from the private hospitals, as was stated by the current chairman of MPDB.

"I noticed that in the medical board, 70% of the complaints are from the private hospitals, which means there is something wrong there." Key informant interview with the current Chairman of the Board

He further said, one of the main areas that results in complaints at the board is communication to patient and keeping that record.

"You do a ward round as a consultant; your name is at the top. There is nothing written, it is signed by somebody who cannot be identifiable, it is in the high court, so you look extremely stupid, because when you are doing your ward round, and somebody is writing your notes, you must really take time to check what he has written. Because most of the times you give good instructions, they don't write… maybe you are also teaching at the same time. Maybe the intern is not even there. And yet when it gets to the cracks, we ask where are the notes, the first thing we look for is the is the file. And this is not only in the public sector, even in the private sector. The notes are very poor, because the doctor will say I did a ward round on this day, then you look around the notes, his name is not there, there is no evidence that he ever came to see the patient and so on, so it is a very serious issue, even simple things like note taking and teaching people to take." Key informant interview with the current chairman of the MPDB.

The search for financial resources makes doctors behave in an unprofessional way, and that is seen at times in the teaching environment, hence it may be perpetuated outside.

"A common challenge to the practice of professionalism in our country is greed, because you want to get monetary gains so you set aside everything else that you think you should be doing right, and you go for shortcuts that influence you." FGD R-1

Mentorship or modelling may also be affected by the vast student population currently being taught at the University of Nairobi. The establishment of the surgical department at the time of the study was 40 faculty members, but the student population at the department were 120 for every 6 weeks and about 55 residents. The mode of teaching is by group, with 20 students per group of 3rd and 5th year students in the three surgical wards.

"*Main challenge in training is that when you look at the medical profession it's an apprenticeship which requires contact between the mentee and the teacher. So when you have a scenario where you see a lecturer maybe once or twice a week for the practical sessions not for the class lectures, you have 19 other students competing for that contact with the instructor then it becomes very hard for you to pick up those skills which you need to learn to integrate into your practice."* FGDM-2

Some of the challenges are perpetuated by of lack of discipline and accountability by lecturers.

"I think that maybe I am the third or the fourth generation. I think some of the people, especially the second generation have gotten away with "murder" in quotes. They don't show up to work, and nothing happens, their work is not audited. Now if there is no effort to enforce discipline if somebody shows up at work drunk, and nothing happens to him, not just here in this [the national] hospital but even in the district hospitals, [disciplinary] actions don't happen because there is no disciplined way of approaching everything and that is enforced. If we brought back the element of discipline, I think professionalism will be restored…." FGDF-2

When discipline is not there, the negative expressions of professionalism by the faculty and other practitioners become the normative expression.

"Just one sentence accountability, say a very senior person signs a document and says cutting time is this time, and it is dated. Several months later no one does anything; another colleague is shouting at another colleague calling names during ward rounds. Everyone knows about this colleague even the other senior colleague knows about this co-worker, and he or she are doing nothing about it. Some things will never change…" FGDF-1

Sometimes it is societal and peer pressure that drives the physicians to want material possessions, making doctors look for more money to be able to survive.

"*There is the mentality of survival then there is also the pressure out there, what the society is looking at; like this is a doctor they should not be driving such a car, they should have such a car."* FGD R-1

"So, our society values money more than helping others." FGDM-1

"That is why a doctor will open someone's abdomen and do something that is not warranted because he wants to buy a house somewhere." FGDF-2

The societal expectation for the socioeconomic status of the doctor and the need for more money have resulted into a situation where supervision, mentorship and modelling are very difficult or non-existent.

2. Working environment

The environment under which we practice is one that has many limitations, both in fiscal resources and in institutional cultures that looks for quality.

"We are working in a system where it is impossible to be a professional, as much as we still see patients. I think it is really amazing that they survive because if you go to surgical room in accident and emergency, it is dirty and congested, when we continue working in such environment then we are actually perpetuating unprofessionalism because if we put our feet down and say we cannot work like this then maybe things can change." FGDR-3

Increased workload regarding number of patients and sometimes because one is working in more than one hospital can make professionalism difficult due to burnout.

"Picture yourself in a situation where there is no morale to work, you have so many patients and few doctors. You are working so many shifts in a week; you are sleeping very few hours in a week. You are tired, you are fatigued, and you are still expected to be professional with each and every single patient. It's tough. As a human being practically speaking I would find that challenging. I think that what happens with most of the junior doctors and seniors, like the registrars when they are also moonlighting, moving from one hospital to another." FGDM-2

"At the end of the day, the people teaching at the university should be able to mentor, but unfortunately, we do not have people who can do mentorship, we are all like children, we pick everything, most things by what we see people doing. If we preach water and drink wine, I most likely would ignore what you said and do what I think is right." FGD R-2

"We may have the mentors, but you find that there is no time that they're available to mentor you because you have a class from 10 am to 11 am. Or they're not there. I can give an example: I had a mentor, and I went to the office like 5times, and I couldn't find him." FGDM-6

The process of employing lecturers and picking students for either undergraduate or postgraduate education seems to look at only the academic qualifications and not the character or the aptitude of the candidate, and this ends up making it difficult to train or be trained in professionalism.

"*I think when the university is choosing the members of faculty, they should have criteria. I think most of the time it usually academic; if I am an academic giant I could be a lecturer, but it doesn't mean I will be able to transfer my skills to the students in the right way. So, there should be other criteria apart from the academic prowess."* FGD F-2

"I think where we fail is when straight from high school, just because of the grades you got you are told you do medicine. I believe we should be having interviews for students and ask these questions like 'Why do you want to become a doctor?' Make that very clear. If it is about passion, not about the money and judge them on that. It should not be about the grades only." FGDM-3

Furthermore, there is no emphasis on the aspect of professionalism; the emphasis is mainly on academic knowledge.

"The syllabus mainly concentrates on the academics, knowledge and skills, and we lose on other issues, social aspects, which we cannot look at a professional without the professional being part of a social setup, and having an acceptable social behaviour." FGDF-2

Lack of formal teaching and definition of terms results in different views with no shared values. This then challenges role-modelling since everyone does what he or she deems fit.

"We have not defined professionalism, we have not contextualized professionalism. Even among our seniors or our peers, what professionalism means is entirely different. The way they engage here [within the hospital] or out [in anther setting] is very different, and sometimes you can find one senior who has a contrary opinion to another in terms of management [of the patient]. Conduct is not defined, so you pick what you think right, so depending on whom you are dealing with you have to be so called politically correct, if so and so likes this, when you deal with her, it is not defined, no standard, no protocols of engagement." FGD R-1

3. Inadequate resources

Surgical practice at the University of Nairobi is an environment where there are insufficient human and material resources that make it difficult for doctors to perform their core duty, thus getting disillusioned.

"There is a challenge to be professional in a setting that is not professional. If you don't have what you need to do what you need to do it also hard for you to be a professional. There are no curtains, there are no gloves, the beds are not enough, there are three patients on the bed. You cannot be professional in a setting that is not professional." FGD F-2

"You come to the theatre, you are informed there are no instruments, the list is cancelled, the next time you will want to be in a place you can practice…" KIF-8

"…intra-operative and post- operative, now inter operative is extremely important because you need to provide quality surgical care, and that is the main issue in this country now, inter-operative you may find that the accessories or equipment are not there. Professionally, all that

must be provided for. So, for example if you want to do even a small operation, there must be a functional suction machine." KIF-9

In summary, the challenges that were mentioned in this study are those of character of the individual, character of the institution, and inadequate resources. Participants were critical of the lack of role models who would mentor students, perceived lack of disciplinary measures for those who err, among other issues. These were then coded for the questionnaire into 13 items that were then tested in the survey (Appendix 7).
The items do not match the themes of challenges in wording, but having looked at the concepts, I developed items that were part of what the interviewees were saying and that were within the three themes that were initially developed.

4.3.2. Quantitative findings

The participants in this survey were 180 since patients' results were not analyzed at this part of the study. The average age and gender ratio are similar to those of the objective 2 above.
The issues that the participants thought were the most important challenges were character of the individual doctor (42.0% strongly agree) and inadequate resources (56.3% strongly agree) (Table 20). There was however strong disagreement with items such as doctors not abiding by regulation, lack of formal teaching and lack of institutional culture to support professionalism as challenges that face either teaching or practice of professionalism at the University of Nairobi (Table 20).

When 'strongly agree' and 'agree' were aggregated, it was found that the most serious challenges at the University of Nairobi were the personality of the individual doctor and inadequate resources. The strongest disagreement was on faculty not abiding with regulation, culture of respecting the rich and lack of formal teaching (Table 21).

Table 20: Survey items and frequencies of the challenges in practice and teaching of professionalism

Item	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)
Inadequate resources (n=174)	56.3	30.5	12.6	0.6
Personality of the individual(n=176)	42.0	46.7	10.2	1.1
Motivation by money(n=175)	24.6	37.7	30.9	6.8
No recognition of work done by doctor's(n=173)	22.5	38.2	33.5	5.8
Culture of respect for the rich (n=173)	20.8	27.2	46.8	5.2
Disillusionment of faculty and student's(n=169)	20.1	46.2	30.7	3.0
Culture of impunity in the society at large(n=168)	19.0	33.3	42.3	5.4
Personal interest overruns patient's interest(n=172)	18.7	43.0	33.1	5.2
Lack of commitment to one's work(n=172)	18.0	48.3	29.0	4.7
No institutional culture (n=173)	16.2	36.4	39.0	10.4
Lack of formal teaching (n=172)	16.2	32.0	40.7	11.1
Poor relation with colleagues(n=173)	13.3	42.8	38.1	5.8
Faculty not abiding by regulation(n=168)	6.6	23.2	58.9	11.3

The cadre of the participants correlated with *no institutional culture to guide professionalism* and *lack of formal curriculum* with statistical significance on Pearson r test (p=0.003 and <0.001 respectively). More consultants agreed with *no institutional culture to guide professionalism* and *lack of formal curriculum* than the auxiliary staff and students. There was correlation between gender and *no institutional culture to guide professionalism* on Pearson r test (p=0.040) (Table 22). More females disagreed with this aspect as being a challenge in teaching and practising professionalism.

There was statistically significant correlation between age and doctors not abiding with regulation, culture of impunity in the society, no institutional culture to guide professionalism and lack of formal curriculum to teach professionalism on Spearman rho (Table 22).

Table 21: Aggregation into agree and disagree

Item	Agree (%)	Disagree (%)
Inadequate resources (n=174)	86.8	13.2
Character of the doctor(n=176)	88.7	11.3
Motivation by money(n=175)	62.3	37.7
No recognition of work done by doctor's(n=173)	60.7	39.3
Culture of respect for the rich (n=173)	48.0	52.0
Disillusionment of faculty and student's(n=169)	66.3	33.7
Culture of impunity in the society at large(n=168)	52.3	47.7
Personal interest overruns patient's interest(n=172)	61.7	38.3
Lack of commitment to one's work(n=172)	66.3	33.7
No institutional culture (n=173)	52.6	49.4
Lack of formal teaching (n=172)	48.2	51.8
Poor relation with colleagues(n=173)	56.1	43.9
Faculty not abiding by regulation(n=168)	29.8	70.2

Table 22a: Correlation of challenges of practicing and teaching professionalism to age, cadre, years one has been in the institution and gender.

		Gender	Cadre		Age	Years
Character (n=176)	Pearson r	-0.039	0.144	Spearman rho	-0.006	0.029
	p value	0.602	0.054	p value	0.939	0.699
Motivation by money (n=175)	Pearson r	-0.086	0.035	Spearman rho	-0.028	0.072
	p value	0.252	0.645	p value	0.708	0.335
Lack of commitment to one's work(n=172)	Pearson r	-0.096	0.122	Spearman rho	-0.091	0.113
	p value	0.198	0.104	p value	0.226	0.131

		Gender	Cadre		Age	Years
Doctors not abiding by regulation(n=168)	Pearson r	0.099	0.086	Spearman rho	0.060	0.232*
	p value	0.184	0.252	p value	0.427	***0.002***
Inadequate resources (n=174)	Pearson r	0.043	0.069	Spearman rho	-0.012	0.021
	p value	0.570	0.360	p value	0.870	0.784
Disillusionment of student &faculty(n=169)	Pearson r	0.042	0128	Spearman rho	-0.092	.133*
	p value	0.580	0.078	p value	0.219	***0.040***
Respect for the rich(n=173)	Pearson r	0.083	0.107	Spearman rho	0.290**	0.216*
	p value	0.268	0.152	p value	***<0.0001***	***0.004***
Impunity in the society (n=168)	Pearson r	0.0756	0.048	Spearman rho	-0.116	0.113
	p value	0.437	0.522	p value	0.120	0.131
Personal interest (n=172)	Pearson r	-0.089	0.065	Spearman rho	-0.163*	0.173*
	p value	0.237	0.383	p value	***0.028***	***0.021***
No institutional culture to guide professionalism (n=173)	Pearson r	-.153*	0.219*	Spearman rho	-0.272**	0.232
	p value	***0.040***	***0.003***	p value	***<0.0001***	***0.002***
Lack of formal curriculum(n=172)	Pearson r	-0.071	.272**	Spearman rho	-0.275**	0.311
	p value	0.341	***<0.001***	p value	<0.0001	<0.0001
No recognition of the doctors by the society (n=173)	Pearson r	0.022	0.012	Spearman rho	-0.018	0.025
	p value	0.771	0.174	p value	0.815	0.740
Poor relation with other health care workers(n=173)	Pearson r	-0.079	0.072	Spearman rho	-0.133	0.173*
	p value	0.292	0.340	p value	0.075	***0.020***

Key

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

In the exploration of the 13 items, factors analysis was performed to establish the organising principle within the items. In doing this I performed first, the Kaiser-Meyer-Oklin Bartlett which was 0.856 with a p-value of <0.001. The reliability test of the items showed a Cronbach's

α of 0.866. Only three factors had Eigenvalues greater than 1. Promax rotation was performed for a simpler structure.

Table 23: Factor loading, Eigenvalues and percentage variance of the three factors loaded by thirteen items on challenges in teaching and practicing professionalism.

	Institutional issues	Personal character	Inadequate resources
Character of the individual		0.329	
Motivation by money		0.795	
Lack of commitment to one's work		0.736	
Faculty not abiding by regulation		0.691	
Inadequate resources			0.667
Disillusionment of faculty and student	0.560		
Culture of respect for the rich	0.688		
Culture of impunity in the society at large	0.773		
Personal interest overruns patient's interest	0.704		
No institutional culture that promotes professionalism	0.782		
Lack of formal teaching	0.838		
No recognition of work done by doctor's	0.628		
Poor relation with colleagues	0.704		
Eigen Value	5.1	1.3	1.1
% Variance	39.4	10.1	8.7
Cumulative % variance	39.4	49.5	58.2

Factor analysis resulted in 3 factors which accounted for 58.2% of the variance, most of which was accounted for by factor 1 (39. 4%).The loading of items indicated the following factor structure. Factor1 (Institutional factors): this included issues like disillusionment of faculty and students, culture of respect for the rich, culture of impunity in the society as a whole, personal interest overrunning patient's interest, lack of institutional culture that promotes professionalism, lack of formal teaching, no recognition of work done by doctors, poor relations with colleagues. Factors 2 (Personal character): included character of the individual, motivation by money, lack of commitment to one's work, and faculty not abiding by

regulations. Factor 3(Inadequate resources): referred to insufficient resources (See Table 23 above).

Some of the items that loaded to the institutional issues would intuitively appear to be personal character of the individual doctor; disillusionment of faculty and student, culture of respect for the rich, personal interest that overruns patients interest and poor relations with colleagues. However, the same items could become normal behaviour in a culture that makes them institutional. The limitation of factor analysis in working with covariates of various items could have played a role.

However, it should be noted that the results from the factor analysis labelled this column as factor 1, so the label of institutional issues is because majority of the items belong to the institutional issues indicated earlier during the qualitative phase. In my reflection of these factors, majority fit with institutional issues from the thematic analysis, so though they may look to be of personal character, I left them where they loaded by the factor analysis.

4.4. What healthcare workers at the University of Nairobi perceive to be the most effective ways of overcoming the challenges to teaching professionalism to medical student and residents?

This objective investigated the surgical community's perception of the best ways of inculcating professionalism among those in training. It set to answer the research question, 'How can the challenges to the practice of professionalism in Kenya be overcome so as to effectively teach professionalism?' Patients were not asked the question on how to effectively teach medical professionalism and though the survey tool was completed by patient, this was not analyzed.

4.4.1. Qualitative data.

For the methods that could be used to inculcate professionalism effectively, we analysed 26 interviews consisting of 16 focus group discussion and ten key informant interviews with senior faculty (Table 2). The focus group discussion and individual interviews generated about 12 views that participants felt were ways of overcoming the challenges and effectively teaching professionalism to the medical students and postgraduates.

The analysis of the interview data had the 15 concepts in Table 24 as ways of overcoming the challenges and effectively teaching professionalism. On further thematic analysis, four themes emerged that had the concepts aggregated as shown in Table 25.

Table 24: Ways to overcome challenges and effectively teach professionalism at the University of Nairobi

Ways to overcome challenges to teaching professionalism	Number of times mentioned
Strengthening regulation	60
Formal training	40
Teaching medicine as a calling	36
Better management of resources	23
Improving mentoring programs	20
Increasing the number of teachers	20
Having social networks	14
Having a separate teaching facility	7
Faculty development	6
Exchange program to help benchmark	4
Leadership for change	3
Professional bodies having a role in regulating professionals	2
Reward system	2
Remuneration	2
Work shifts	2

Table 25: Emerging themes and the constituent concepts of ways of overcoming the challenges and effectively teaching professionalism at the University of Nairobi.

Themes	Ways to overcome challenges and teach professionalism
Overcoming issues of personal character	Strengthening regulation Strengthening mentorship program Leadership for change Professional bodies having a role in regulating the profession
Overcoming institutional problem	Having a separate teaching facility for the University Social networks Better management of resources Increasing the number of teachers Reward system Better remuneration Work Shifts
Overcoming inadequate capacity	Faculty development Formal training Exchange programs to benchmark
Focus on aptitude	Teaching medicine as a calling

The themes are discussed below and illustrated by the excerpts from the interviews.

1. Overcoming the challenge of personal character to foster professionalism.

While the self-regulation should be part of professionalism, it seems that it begins after graduation; and so in school, and even among those who have graduated, there appears to be problems that require the attention of the MPDB. It was suggested that this regulation should begin from medical school, and should be systemic so as to enable individuals to form their identity from early on.

"Repercussions should be put in place because half the people know what is right, and they know how to do it right; the problem is they just don't want to do it. So, we should have repercussions for them." FGDM-2

"You can't make a mistake, because you know what's going to happen to you. You need to do things properly, within the system… there's a schedule or people waiting on you, you have a

reputation within the community. If you don't act the way you're supposed to, it will reflect." FGDM-2

"This regulatory authority which you say should be the last stage, I think that is a big mistake; some of us are not aware that [regulatory] body exists until you become a doctor. So, in the first year when you get in, you are not aware that there is a board that regulates your profession. I think the board should come in right from the first year, let whoever is coming in get to know what it means to be in this profession: the regulations, the punishments so that they grow with it, as they come out they know what is expected regarding discipline." FGD F-2

Role-modelling requires congruency of the rhetoric with the lifestyle of the instructor. The participants suggested that mentorship in small groups would enable critical thinking and questioning of values practised, therefore ensuring there is transformation at the individual level through the group.

"And for the student, it depends on the level at which you are teaching; at first the teacher has to be well trained in those things, if you are teaching undergraduates they don't have so much contact with clinical work. Then, it can be a formal class where you tell the student how to be a professional doctor.When you are teaching postgraduates students I think probably it has to be up- scaled a bit because really, nothing speaks louder than actions: you might tell me this and then I see you doing this, then I don't care what you had said. You tell me to come to the theatre at 8, and you come at 11; you just say when I get to that stage I will be doing this." FGD R-3

"Mentorship programmes also really help. I can feel like if there is a chain right from the teacher, registrar to the students, not the ten thousand people to one kind of mentorship. If every registrar is attached to a fifth year and to a fourth year, it's a sort of a linking chain where you actually take responsibility for people near your level." FGDM-2

Peer mentorship through benchmarking by the way of exchange programmes with other universities was another way that was suggested to boost the inculcation of professionalism.

"Alternatively, I think we can have exchange programmes with the other institutions, or like other medical schools so that we can see how they do it. What we consider as being professional

may not be regarded as professional elsewhere, so through those programmes we can learn a lot." FGD F-1

2. Overcoming the challenge of institutional inadequacies to foster professionalism.

The participants in the interview suggest creating an enabling environment in the institutions that will foster professionalism. Some of challenges we have seen include institutional working environments that are proxy for institutional cultures that may not enable professionalism.

Cultural change requires leadership. We require leadership to modify the ideals of the institution at the entry of teachers and students. Aptitude and desire to make a difference should be the focus of development, hence changing the paradigm from strategic learning where students and qualified doctors or surgeons want prestige, to where they become doctors for improving the lives of others. The recruitment of medical educators and students should not only be on grades but on the idea that medicine is a calling that requires passion and commitment, without ignoring academic abilities.

"I agree that some things need to change, and it will take leadership to create awareness and bring in the new ideas." FGDM-1

"I think also when it comes to the teaching aspect, I think many people as long as you are probably a professor, or you have a Ph.D. it becomes automatic that you can come and lecture students, which I do not think is appropriate. I think they should go through some training. Just because you are a professor does not mean that you will make an effective lecturer. So, I think there should be some training for them, yeah, before you become a lecturer." FGD M-2

"*Medicine is not really about the grade; it comes with a passion. Do you have a passion for patients? The vocation aspect plays a role. If it's something you really want to do, then you'll be comfortable doing it other than doing something because you think there's money. You may, when you get there, realize there is little money with a lot hard work, then that's when you get people dropping out of school or when they finish they open these funny clinics around town to get some coin."* FGDM-5

The participants also shared the idea that the wards and operation rooms are not adequate, and that there is need to have people working in shifts to decongest the wards. There were also suggestions that this could be advanced to managing the institution in small manageable areas, so that the work is done more efficiently. The other suggestion was better remuneration for retention of doctors within the country.

"We can enhance professionalism by rewarding those professionals. The people who are the most unprofessional are the most successful." FGDM-7

"When you are losing 50% of the class, they are all going out after graduation, there is a problem. And this is not something I am thinking about now, I have been to the ministry of health in the past, nowadays I don't go out to them, and told them [then, that] we cannot sustain this. Because when doctors graduate, they are paid [Ksh]40,000. In this economy, how is that young person going to start his family? And that is the person we expect to be working around the clock, how is that person going to survive, 40,000 shillings? In the countries where they go, they are paid [Ksh] 200,000. I was telling the minister, this was in the 90's, that if we paid these young people [Ksh] 200,000 per month, they will all stick here and they will work like wild for the country, and the answer I got always was that the civil service structure salaries are the same, why are they the same? Why do you deny this young person his right of earning when he is sacrificing 24 hours, and when he has gone through 5-6 years of thorough grounding, then in the end you give him nothing?" KIF-5

"Or maybe is in the ward with twenty 4th years and twenty 5th years, [the patient is surrounded with huge number of people]. It's not fair to both the patient and the practitioner. The number of patients waiting for surgery in some wards is high, with high numbers of surgeries being postponed. Instead of ten surgeries, they'll do five. They already have the backlog. The service providers should work in shifts, like in theatre the work should not only be done during the day. A half of them should come during the day, the other during night and if that would happen we would not have these backlogs we have in the wards." FGDR-1

3. Fostering professionalism through having shared values

Creating a community of shared values requires social networks among professionals to help one another, and also reward those who have excelled so that others can be motivated. This engagement can also be with students.

"Introduce certain incentives; not salary; let them have free mortgage, put that fund there so that they can borrow it, and you deduct it from their salaries. Have some form of health insurance for them, because what do doctors want? A nice house, safety for their family wherever they are, and then in each hospital let there be a state of the art private practice wing, not some bogus things which they fight over, like the same theatre which they don't even get to use. Reduce the number of students or get alternative sites which you have inspected and found to be fit for teaching." KIF-8

The environment can be made enabling by better management of resources so that we can deliver on our mandate. If that is not possible because of twin administrative structures, maybe the best would be to get a University hospital for wholesome teaching with one administration.

"Looking at it from an institutional point of view, we need to decide that we are actually going to teach the students the right thing. I think our problem is that we are linked to a government hospital which is to some extent being mismanaged such that we keep getting the wrong picture of how a hospital runs. Either we transform the way the hospital is run, or we get our teaching hospital. To my understanding, out there the teaching hospitals are the best hospitals because that is where the standards are kept, and that is where the best care is given." FGDF-2

There is a need for a better reward system for motivational purposes, to foster change and the continued practice of professionalism.

"Having some form of reward system where someone is appreciated. You work the whole night, the next day somebody forgets you did a major operation. Nobody will see the good in what you do; some level of recognition can motivate you." FGDR-1

Teaching for a deeper understanding that would change character requires integrating cultural constructs, or changing them depending on the times, to that which can engage with the student. In a more collectivistic than individualistic style, reducing the power distance between teacher

and student helps in enhancing understanding of what it means to be professional. This understanding can be better when it is begun earlier.

"A career day where they bring different professionals: pilot, a doctor, an engineer and each speaks about the career, the positives, and the negatives, then they tell you that you have to decide. So that people do not go into any career because of financial issues, one should be told what's important for you to go to any career is your passion. So, I think it should start early before one gets frustrated. Because when you decide in two years that this is a wrong choice, it will be late. Often people choose to complete the course and end up living with the frustration." FGD F-1

An informal setting where people talk without fear of victimisation helps to set up an environment of knowing people better. It is only in doing this that characters of colleagues will be known, and collegiality developed between juniors and seniors as well as between peers. This then enables correction of bad attitudes and character without seeming to be malicious to anyone.

"*Perhaps a more significant thing is to strengthen our networks within, because one of the issues seen now is that yes, we know that so and so has a problem of going to buy a drink or two every day in the morning, but the much we do is talk about it, and that's it, and maybe even laugh about it. However, we do not have these social networks; I have a feeling that this profession of ours is particularly hard hit. Because of the nature of our training, we tend to be solo professionals, so you think I can go out and solve everything by myself because that is how you are wired. We must deliberately develop the social networks so that when I see this colleague of mine seems to have issues, we must find a way of bringing him back… That will also help us to do what we call self-regulation within the profession. Because the regulatory authority will be there but they deal with the end stage. Usually, when things reach that level, many things would have happened which would have been picked by colleagues if we had stronger networks."* FGD F-2

4. Overcoming inadequate capacity and lack of curriculum

Learning abstract values requires a lecturer who understands and demonstrates issues so that the students grasp them in their cognitive domain and are able them to practice them. It requires a formal curriculum that runs from the first year to the last year, appropriate to the level of opportunities available to practise what they learn in class. This may require faculty training.

"*There should be like classes on bedside manners, defining professionalism that should be integrated into the theoretical classes, so that you know what you are supposed to do; so when you go for practical lessons then you are shown what you are expected to do because you already have the theory in your head. It should be like such."* FGDM-7

Furthermore, in a field such as professionalism, there needs to be faculty training so that there is understanding of the issues by the teachers that will help them teach and assess; this could take the form of workshops and retreats.

"Train the teachers well and explain to them the importance of professionalism. An institutional framework whereby, for some periodic retreats, the doctors go and assess themselves and do team building." KIF-2

Given the large numbers of students and increased workload, it was suggested that there is a need to increase the teaching staff to student ratio for better apprenticeship to take place.
"For training purposes, the number should be reduced or the staff increased, so that when you're having bedside teaching you have 2 to 3 students; each gets to do the full procedure so that you can be sure that I have taught these students how to examine the abdomen, such that when they are in the ward they know what to do." FGDM-5

In summary, during the interviews participants suggested that to foster professionalism in the University of Nairobi one needs an enabling environment with emphasis on values, a formal curriculum to enable cognitive awareness, and a reflective group on mentorship made of teachers and trainees.

4.4.2. Results of the survey on the views about how to effectively teach professionalism in the University of Nairobi.

The initial qualitative interview generated about 15 different viewpoints that were felt to be ways to help overcome the challenges and foster professionalism in the University of Nairobi. However, in the survey, I dropped the concept of professionals taking charge of regulating the profession because I thought that was covered by the regulation aspect. I added two items; recruitment of teachers and students as an aspect that was mentioned that involved recruiting people who can be taught medicine as a calling. I also included working in small manageable areas for efficiency that was a different aspect of working in shifts. A further four items were posed as a separate set of questions that directly asked about teaching of professionalism. The questionnaire therefore had two groups of items concerning the questions of how to overcome the challenges and effectively teach professionalism (Appendix 7, question 18 and 19).

The methods that the participants thought were the most important ways in which to overcome the challenges in order to effectively foster professionalism included good and improved mentorship programs (77.5% strongly agree), having an excellent teaching facility and environment (74.7%strong agree) and a reward or recognition programme (69.5% strongly agree) (Table 26). No respondents disagreed with exchange programs that would lead to benchmarking and peer mentorship (Table 27).

Table 26. Frequency table for the items surveyed for nurturing professionalism

	n	Strongly agree%	Agree %	Disagree %	Strongly disagree %
Mentorship programs	173	77.5	20.8	1.7	0.0
Excellent teaching facility	174	74.7	24.7	0.6	0.0
Reward system	174	69.5	29.4	1.1	0.0
Remuneration	173	67.6	29.5	2.89	0.0
Exchange programs	172	64.5	35.5	0.0	0.0
Regulation	176	58.5	38.7	2.8	0.0
Faculty development	174	59.2	38.5	2.3	0.0
Smaller manageable areas	174	57.4	36.8	5.2	0.6
Leadership	173	56.1	41.6	2.3	0.0
Formal curriculum	172	55.2	41.3	2.3	1.2
Work shifts	171	51.4	39.8	8.2	0.6
Increase number of lecturers	173	50.3	36.4	11.6	1.7
Social program	172	44.2	51.7	3.5	0.6
Recruitment	172	41.3	48.8	8.7	1.2
Getting a teaching site	174	40.2	39.1	17.8	2.9
Medicine as a calling	173	24.9	43.9	25.4	5.8

Teaching medicine as a calling was one of the ways least seen as a way of fostering professionalism (Table 26). Some participants also disagreed with having a separate site for teaching as overcoming the challenges within the institution so as to foster professionalism (Table 26).

There was statistically significant correlation between gender and mentorship, working in shifts and increasing the number of lecturers ($p=0.004$, 0.030 and 0.027 respectively) with Pearson r (Table 28). Male participants were more likely to agree with mentorship as a way overcoming the challenges and fostering professionalism than female participants, but female participants were more likely to agree with working in shifts and increasing number of lecturers than males.

Table 27: Aggregation the responses of overcoming the challenges to foster professionalism into agree and disagree

	n	Agree %	Disagree %
Mentorship programs	173	98.3	1.7
Good teaching facility	174	99.4	0.6
Reward system	174	98.9	1.1
Remuneration	173	97.1	2.9
Exchange programs	172	100	0.0
Regulation	176	97.2	2.8
Faculty development	174	97.7	2.3
Smaller manageable areas	174	94.2	5.8
Leadership	173	97.7	2.3
Formal curriculum	172	96.5	3.5
Work shifts	171	91.2	8.8
Increase number of lecturers	173	86.7	13.3
Social program	172	95.8	4.2
Recruitment	172	90.1	9.9
Getting a teaching site	174	79.3	20.7
Medicine as a calling	173	68.8	31.2

Cadre of the participants was significantly correlated with mentorship, exchange programs, better remuneration, working in shifts, excellent teaching facilities, and reward system (p=0.001,0.040, <0.0001, 0.017, 0.019 and 0.023 respectively) with Pearson r test (Table 28). Some student disagreed with mentorship as solution to the challenges as a way of fostering professionalism, but this was a small number. Consultants and registrars were more likely to agree with better remuneration than students and other participants.

There was no statistically significant correlation between the years one had been in the institution with any of the suggestions of the participants to overcome challenges and foster professionalism at the University of Nairobi on Spearman rho (Table 28).

Age of the participants was significantly correlated with exchange programs, working in shifts and increasing number of teachers (p=0.044 and ,0.011, and 0.041 respectively) with Spearman

rho test (Table 28). The younger participants were more likely to agree with exchange programmes and working in shifts than the older ones.

Table 28: Correlation of the items overcoming challenges to foster professionalism with age, years in the institution, gender and cadres

Ways to overcome challenges and teach professionalism	n		Gender	Cadre		Age	Years
Regulation	176	Pearson r	-0.039	-0.001	Spearman rho	0.080	0.101
		p Value	0.601	0.987	p Value	0.287	0.178
Leadership	173	Pearson r	0.003	0.066	Spearman rho	0.017	0.038
		p Value	0.967	0.375	p Value	0.819	0.613
Recruitment	172	Pearson r	0.130	0.103	Spearman rho	0.019	0.066
		p Value	0.081	0.168	p Value	0.804	0.378
Medicine as calling	173	Pearson r	0.132	0.146	Spearman rho	0.067	0.053
		p Value	0.077	0.051	p Value	0.370	0.439
Social program	172	Pearson r	-0.062	-0.010	Spearman rho	0.090	-0.101
		p Value	0.408	0.892	p Value	0.229	0.178
Formal curriculum	172	Pearson r	0.128	0.124	Spearman rho	0.065	-0.008
		p Value	0.088	0.097	p Value	0.388	0.920
Mentorship program	173	Pearson r	0.211	0.251	Spearman rho	-0.012	0.081
		p Value	***0.004***	***0.001***	p Value	0.877	0.279
Faculty development	174	Pearson r	-0.113	0.127	Spearman rho	0.080	0.050
		p Value	0.130	0.089	p Value	0.287	0.503
Exchange program	172	Pearson r	-0.013	0.153	Spearman rho	0.035	-0.085
		p Value	0.863	***0.040***	p Value	***0.044***	0.259
Better remuneration	173	Pearson r	0.132	0.261**	Spearman rho	0.003	0.095
		p Value	0.076	***<0.0001***	p Value	0.965	0.207

Ways to overcome challenges and teach professionalism	n		Gender	Cadre		Age	Years
Work shifts	171	Pearson r	0.162	0.178	Spearman rho	0.189	-0.092
		p Value	***0.030***	***0.017***	p Value	***0.011***	0.2182
Manageable units	174	Pearson r	-0.046	-0.110	Spearman rho	0.090	0.008
		p Value	0.543	0.143	p Value	0.230	0.911
Excellent teaching facility	174	Pearson r	-0.080	0.175	Spearman rho	-0.025	0.039
		p Value	0.287	***0.019***	p Value	0.736	0.602
Increase number of teachers	173	Pearson r	0.165	0.059	Spearman rho	0.152	-0.111
		p Value	***0.027***	0.431	p Value	***0.041***	0.139
Reward system	174	Pearson r	-0.059	0.170	Spearman rho	0.014	0.051
		p Value	0.433	***0.023***	p Value	0.852	0.496
Alternative teaching site	174	Pearson r	-0.037	0.102	Spearman rho	0.141	-0.110
		p Value	0.626	0.171	p Value	0.059	0.141

In the exploration of the 16 items to establish whether there are 'hidden principles' that could reduce them to organized groups, factors analysis was performed. Kaiser-Meyer-Oklin Bartlett was 0.924 with a p-value of <0.001. Promax rotation for easier reading of the results was also performed. The reliability test of the items showed a Cronbach's α of 0.827. Only four factors had Eigenvalues greater than 1.

Factor analysis resulted in 4 factors which accounted for 57.1% of the variance, the largest component of which (30.12%) was accounted for by factor 1. The loading of items indicated the following factor structure:

Factor1 (better teaching environment) was loaded with the following items; good teaching facility, increasing the number of lecturers, reward system, university teaching site, and better remuneration. This could be grouped as ‘better teaching environment’.

Factors 2 (character formation) had the following items; regulation, leadership, mentorship programmes, and exchange programmes, which would be fitting character formation. The loading of exchange programs is below 0.5 and therefore not significant in defining the factor.

Factor 3 (making work easier), had the following items loading; formal curriculum, faculty development, work shifts, and small manageable areas. This may fit with making work easier through capacity building. The loading of small manageable areas is below 0.5 and may not be useful in defining this factor.

Factor 4 (aptitude) loaded the following items: recruitment, medicine as a calling, and social program that enables students and faculty to interact.

In the second set of questions about improving teaching of medical professionalism at the University of Nairobi, a different 5- Likert scale was used. Instead of using agree (‘strongly agree’ to ‘strongly disagree’), I used usefulness of the methods suggested to foster professionalism (‘extremely useless’ to ‘extremely useful’). This is because similar questions had been asked in the first set of questions with a different Likert rating. Very few participants thought some of the methods were ‘not useful’, while majority opted for ‘useful’, ‘very useful’ and ‘extremely useful’ (Table 30).

Most of the items were found useful by the participants in this survey (Table 31), though retraining faculty had the highest rating with only one person rating it as not useful. Recruitment of faculty based on their attitude and ability to deliver had the highest rating in terms of being extremely useful.

Table 29: Factor loading, Eigenvalues and percentage variance of the four factors loaded by fifteen items on fostering professionalism

Item	Factors			
	Better teaching environment	Character formation	Making work easier	Aptitude
Regulations		0.825		
Leadership		0.648		
Mentorship program		0.58		
Exchange programs		0.378		
Recruitment				0.546
Medicine as a calling				0.783
Social Program				0.511
Formal curriculum			0.805	
Faculty development			0.599	
Work shifts			0.625	
Small manageable areas			0.468	
Excellent teaching facility	0.782			
Increase the number of lecturers	0.674			
Reward system	0.757			
Teaching site	0.552			
Remuneration	0.517			
Eigen value	4.82	1.78	1.4	1.14
% variance	30.12	11.17	8.72	7.11
Cumulative variance	30.12	41.29	50.01	57.11

On the question on how to overcome the challenges to fostering professionalism, participants indicated that overcoming the challenges of personal character, institutional inadequacies, proper recruitment methods either for faculty or during students' admission that focus on aptitude, and having clear integrated formal curriculum would aid in fostering professionalism at the University of Nairobi.

Table 30: Rate the usefulness of the following items in improving the teaching of professionalism at the University of Nairobi.

	n	Extremely useful	Very useful	Useful	Not useful	Extremely useless
Retraining of faculty	175	41.7	33.1	24.6	0.6	0.0
Recruitment of faculty	174	54.6	30.5	13.2	1.7	0.0
Admission of student	174	38.3	30.9	29.1	1.7	0.0
Having formal curriculum	173	38.7	41.0	18.5	1.7	0.0

Table 31: Usefulness of the items aggregated into "useful" and "not useful"

	n	Useful	Not useful
Retraining of faculty	175	99.4	0.6
Recruitment of faculty	174	98.3	1.7
Admission of student	174	98.3	1.7
Having formal curriculum	173	98.3	1.7

In cross tabulation, it was the consultants who did not like the idea of retraining faculty or recruitment by attitude and ability to deliver. There was statistically significant correlation between recruitment and cadre of participants, age, and years one had been in the institution (Table 32).

Table 32: Correlation between the rating of usefulness (of items on fostering professionalism) and age, gender, cadre, and years one has been in the institution.

		Gender	Cadre		Age	Years
Retrain faculty	Pearson r	-0.097	.169*	Spearman rho	-.149*	.160*
	p value	0.203	0.025	p value	0.049	0.038
Recruitment of faculty	Pearson r	-0.045	.364**	Spearman rho	-.289**	.224**
	p value	0.552	<0.001	p value	<0.001	0.004
Admission	Pearson r	0.007	-0.007	Spearman rho	0.016	-0.035
	p value	0.927	0.924	p value	0.838	0.656
Formal curriculum	Pearson r	0.108	.151*	Spearman rho	-0.099	0.101
	p value	0.157	0.048	p value	0.195	0.194

4.5. Summary of the results.

Participants have indicated that they agree with a number of concepts as shown in table 5, with majority mentioning respect as the concept of professionalism and confirming that during the survey, when asked which items best describe professionalism. Participants who are junior in the profession seem to put respect as something they aspire to see in their role models but they hardly see. The main method of teaching professionalism as indicated by the participants is role-modelling. The challenges perceived by the participants were mainly personal character of the individual practitioners, inadequate resources and weakness of institutional systems and infrastructure. It was suggested that if overcome, professionalism could effectively be fostered at the University of Nairobi.

In the next chapter, we will discuss these results as per each objective from the perspective of what is known in the literature and was evident at the University of Nairobi.

CHAPTER 5:
DISCUSSION BY OBJECTIVES

Introduction

There has been an increased interest by medical educators in professionalism, its cultural understandings, how it is taught and practised. This has been due to failure by doctors to practise it, and difficulty in defining it so that it can be accurately taught and assessed. This complexity is brought about by many factors that include but are not limited to its embeddedness in the culture of a community, and its basis in behaviour or virtue. Western, Eastern and Arabian concepts with their nuanced cultural emphasis have been defined in many reviews and studies. However, the developing world, especially in the African context, has not yet really defined the cultural concepts of medical professionalism.

This study aimed to explore the concepts of professionalism in the medical profession within a developing African country through an exploratory strategy of sequential mixed method. The findings can assist medical educators to better understand the concept and the environment, develop relevant curricula and assessment tools, determine the challenges facing them, and develop a formal way of instilling professionalism. Most important of all is the complexity, cultural nature, and understanding of professionalism. Given that this is a different cultural setting from those associated with the concepts already known, this study makes it possible to avoid approaching medical professionalism with a straitjacketed mindset using methods and understanding adapted from other parts of the world.

This Chapter focuses on the analysis of the views generated through the interview and the survey findings of this research and how they relate to experiences in other regions as gathered from the literature review. The discussions in this section will focus on the objectives and guided by the research questions.

5.1 Conceptualization of what professionalism meant to participants.
5.2 The perception of participants on how professionalism is being taught.
5.3 Participants' perception of the challenges in the teaching and practice of professionalism.
5.4 Suggested ways of overcoming the challenges to foster professionalism effectively.

5.1 Conceptualization of what professionalism means to participants

This section will discuss how the surgical community of the University of Nairobi conceptualizes professionalism, and how it relates to the literature that that already exists. Where is the gap, and is there any finding that is unique to the cultural context of the University of Nairobi and to Kenya by extension?

The findings of this study suggest that many of the domains of medical professionalism found in the ABIM were also found in the Kenyan context: excellence in the care of the patient, concern for the patient and character in practice. However, respect as a component of professionalism repeatedly had the highest frequency of responses by participants in the interview. Respect had the highest number of people who strongly agreed, but some of other items had higher aggregated agreement than respect. The survey indicates that female or more junior participants more commonly mentioned respect in the negative form. They often were shown disrespect and saw other colleagues disrespected by the senior consultants. This might have led to respect having the highest rating in general.

One of the interviewees is quoted as saying "*It is African to respect.*" The depth of respect within the Kenyan society can be illustrated by the use of a special word that is solely for greeting seniors, and which cannot be used for peers or those younger. In particular, this greeting, "*shikamoo*", is used throughout coastal Kenya. Respect was depicted as being that of acquiescence towards seniors, especially students towards faculty. The practice of respecting seniors is based on the belief system that they are the custodians of wisdom and advice. However, more than that, Africans believe in the connectedness of the world between the living and the dead which can determine one's blessings and curses in life (99,100). The implication is that those who are older can place a blessing or a curse on the younger person, depending on the degree of respect they do or don't receive from them.

Respect between a doctor and his/her patient can be demonstrated through caring. Caring is recognized by being available, empathetic and being able to explain to patients their condition in a manner they can understand. Further, the patients are treated with respect because they are considered to be closer to death, and the dead play a major role in the life of the living within the African culture (99). African culture is also known for its care of the vulnerable (98,216). However, in the commercialized world, patients are often seen as customers; hence, some

doctors even though employed and paid as civil servants will often not be available to attend to public patients because of their busy private practice (1).

In their review of the worldwide cultural constructs based on Hofstede's work (196), Wursten and Fadrhonc (198) place Africa in the pyramid cluster. The cultural constructs in this cluster include high power distance index among other indices. This implies that in Africa, people who are less powerful accept that power is distributed unequally and are subservient to the powerful, and hence are more likely to give them respect based solely on their position. This is consistent with our results where respect was a highly important attribute in comparison to others that were listed as essential for professionalism. It is also consistent with the fact that students and nurses most often viewed senior consultants as not respecting them.

Given that professionalism is a cultural construct and a social contract between doctors and society (229), the philosophical undertones of culture will colour the themes. This study showed that professionalism in the Kenyan culture emphasizes respect. Though other domains were mentioned, respect was mentioned higher throughout the study, both in the interview and as the highest with 'strongly agree' during the survey. In the literature, the impact on professionalism of the health care worker's culture of origin has been investigated in numerous cultures. A survey among 45 health care professionals from the Arabian world (Egypt, Saudi Arabia, and the United Arab Emirates), revealed autonomy of the professional as important (79). This reflects the paternalistic dominance seen in the Middle Eastern cultures. In Taiwan, the Confucian cultural framework of integrity/honour of the individual was found to be strongly emphasized by the study participants when asked about professionalism. In his review of the definitions and roles of medical schools to ensure the next generation of doctors are professionals, Cohen, an American author, emphasizes the use of the ABIM document for its definition of professionalism. This paper is based on Western cultural norms where the concept of the individual and their rights take precedence. Hence, one of the main principles found in the ABIM document is patient autonomy, a reflection of the Western Hippocratic tradition within the American medical culture.

The main themes that we found in this study revolve around the personal character in practice, ethical orientation towards the patient and excellence in service. Various individual components of the 'excellence in service' factor were only mentioned a few times in the interview or were less frequently reported as "strongly agreed" in the survey. However a high

number of participants who did report at least “agreeing” or were “neutral” statistically gave this theme a stronger factor variance than the other themes, since factor analysis aggregates items based on variances. It is an indicator of the general knowledge of what constitutes professionalism. These components are reflective of the humanistic domains of professionalism. Despite more moderate reporting, it still reflects many similarities between our study and the domains found in the ABIM document. Tsugawa *et al.* (22) note in their study that there are many similarities across cultures on how they perceive professionalism, and it is likely that the ability of the ABIM components have been validated in many countries. This may explain why many participants mentioned them, as they are widely known. This is true in the sense that most of the attributes are widely known in all culture, but every culture has nuances and emphasis they make on particular attributes. However, in our study, the lower reporting overall on many ABIM domains like honesty, humility, justice, dedication and commitment to mention a few, indicates a preference of Kenyan practitioners to perceive respect as a major domain as opposed to the humanistic domains.

Knowledge and skills, and to *do no harm* score higher because the default position in teaching surgery is that of technical skills and to do no harm. This was explained by one of the senior faculty and is an aspect that is derived from the Hippocratic Oath, indicating the influence of Western culture on medical education. The conceptualization of professionalism as being excellence in service as is seen in this study implies a desire for positive clinical outcomes. This result could take the form of quality of care and monitoring results for purposes of improvement and learning. The developing world rarely reports on their audits (230,231). This implies that certain facets of western medicine, where audits are common, are only slowly being adopted. Historically and up to now, the main surgical teachers and those who continue to write most of the surgical books that the Kenyan surgeons read, originate from a western cultural perspective. That influence should not be underestimated as levels of literacy increase.

Another area where the ABIM list of professional attributes and our study are similar is on the theme of excellence of care, in particular in clinical skills and knowledge. Professionalism as defined by Pellegrino (1), has three elements: acquisition of skills and knowledge, self-regulation and a shared commitment. In our study, participants frequently reported that for one to be a good doctor, one should be able to able to perform one’s work skilfully. This mirrors themes such as excellence in duty as found in the ABIM framework and has been suggested by authors like Al-Eraky (23).

Confidentiality was rarely mentioned during the interviews. This is again likely a reflection of Kenyan culture where the African *Ubuntu* ideology of "I am because we are" makes it difficult in most settings to value confidentiality. Ubuntu is seen when the relatives of the patient and the extended family demand to be present at all times and to be fully informed of the patient's condition, irrespective of the patient's desire and many times, without his or her consent. This same lack of importance attributed to patient confidentiality was also noted in an earlier article by Baingana *et al*. in Uganda (82).

Many participants reported an understanding of professionalism, but also noted their main experience was a paucity of some of the attributes such as availability, among others. Though dedication and commitment were mentioned, they scored lowest in the survey. Further, many participants reported the presence of negative attributes such as differential attitudes and behaviours by some doctors towards private patients as compared to non-private patients. This reported paucity of positive professional attributes and the presence of negative attributes had been previously noted by other authors in low to middle-income countries (212,213).

Corruption both in the form of accepting gifts as well as taking time meant for patients in public care was noted in Estonia and South Africa (212,213). This concurs with our findings that the attribute of altruism was not mentioned even once by any of the study participants. Where the society is so influenced by these corrupting influences and there is poor pay, the doctors' behaviour is explained as seeking alternative ways to survive.

Professionalism, even in the form of the most important attribute reported (respect), was seen as lacking by the study participants. For example, respect was reported as not being practised by senior health care workers towards their junior colleagues. This caused frustration in the junior workers who felt that they had no mechanisms to change the situation. The study results portray an environment where juniors do not question their seniors. Similar environments have been reported in Japan and in Turkey, where the hierarchical cultural/social systems allow unethical behaviours by seniors to go unreported and unquestioned by the juniors. This propagates an environment of ongoing negative professional attributes because though what should be done is known, the juniors see conflicting behaviours and then model those behaviours when they become seniors (217,218).

These ideas agree with the definition given by Epstein and Hubert that "professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served" (84). This definition would fit well into the Kenyan culture with the addition of respect. In this study, the decreased emphasis on certain components of the ABIM model such as altruism and commitment demonstrates the impact of different cultural concepts. It may also be explained by lack of rigorous debate in this circle on professionalism and the health care system that makes the public patient 'a hospital patient' and not an individual doctor's patient. The health care system that operates in this way was identified by Birden et al as one of the factors that makes altruism much less apparent in the United Kingdom than in USA, where patients belong to specific individual doctors (57). It strengthens the need for concerted efforts to teach professionalism, with the incorporation of the tenets of the specific cultural context despite the generic delivery of many of these traits across geographic regions.

The Parsonian view on profession that influenced most sociologists' definition has in its core technical expertise as the main source of authority (63,89). That authority is used to mediate between the patient and society, and attracts trust of the patient. This is maintained by the character of the physician, whose actions are governed by the interests of patient and not their own. The institution regulates this authority so that they ensure that it is used for the good of society (63). The physicians are hungry, not for money but for respect of the society; these views were however found to be inadequate in that there are those whose primary interest is money, as revealed by the Hafferty review (63,101). The sociologists reviewed regulation as both a way to maintain authority and also for selfish reasons (63,88,89). When physicians talk of regulation, it may be important to look at it from the point of attaining and maintaining authority.

Looking at subsystems models like that of Hafferty and Castellani and the results as seen in Table 8, it is difficult to pin-point where our model lies among the micro-level of professionalism (14,101). It is nearer the '*Lifestyle',* in which personal morality is highly rated while issues to do with justice or equality are not given very high marks. However, one notes the lack of a perfect mirror image of the attributes and their prioritization of the '*Lifestyle'* with this study's findings (14,101). Most of the items were highly rated, which could be explained by the influence from the Western literature that makes individual practitioners and medical

educators aware of the issues. However, as we can perceive from those who are taught, they are not well practised. There is a clear incongruence between what is known to be professional and that which is being practised. Though the '*Lifestyle'* subsystem predominates, there is equally '*entrepreneurship*' that makes individual practitioners want to be in private practice, at the expense of the public where they are fully employed. The subsystems of professionalism explain the incongruence seen, and the fact that we can easily live with them because our understanding of what professionalism is allows us to do so.

Wagner *et al*. identified three themes: knowledge and skills that we could equate to excellence in service, patient relations, and character virtues, all of which are consistent with our findings in this study, especially with regard to the importance of personal character and ethical values (76). This study does indicate the elements of technical skills, character and ethical values in caring for the patient. The framework identified by Ho et al is complex, but seems to suggest that different segments of the population emphasized different aspects of professionalism (12). They however used consensus, which may be influenced by group thinking; while in our study during the survey, everyone was voting by what they saw and knew as individuals, hence removing the effect of thinking as a group. In this study, some students disagreed with respect being most important, while the rest totally agreed. This '*disagreement*' of some the students might be explained by their perception of what a good role model was, and not been matched by what they were seeing in their lifestyle.

This study had its premise on exploring the concepts that are unique to the cultural setting. Both Ho et al. and Al-Eraky et al. agree that most of the concepts will be found in every culture. Tsugawa also noted that the Western framework such as the ABIM list have found space, been debated rigorously in medical education journals and have been validated in many nations (12,22,79). But they also point to a unique cultural emphasis. This study finds that respect is the concept that is unique in our culture because of the emphasis it was given in the interviews, and the fact that it received the highest 'strongly agree' score during the survey. Further, respect was mentioned more with different nuances from different groups.

One of the reasons given for respect as a concept of professionalism during the interview was traditions left by the Western education in medical schools from the Hippocratic tradition. This was stated in regard to respecting the patient. A further reason was of religious nature, the patient's body, being the temple of the Spirit, should be honoured. However, there were

indications in two quotes earlier that indicated that there is a cultural basis for the respect as well. We will be looking at this in depth as we answer the question, "Why does the context emphasize on respect?" This will be in the next chapter, and will help us discuss how this cultural view may be affecting other areas of professionalism, including teaching and the challenges.

5.2 The learning of professionalism

This section will discuss the finding of the study on the question of how professionalism is being taught and learned at the University of Nairobi, from the perspective of what is already known in litetrature. What are the gaps in our context? Is there anything new we can learn from the study setting in terms of teaching and learning professionalism, or what could be learned from what is already in other contexts?

Inculcating professionalism is not just providing information to students, whether at the undergraduate level or postgraduate level; there is evidence to suggest that the students at both levels will do what they see and not what they are taught (156,186). The students may know what they should do, but if they do not understand the cognitive processes underlying their professional responsibilities, they would always do what they see. This has led to the erosion of empathy to patients in medical schools (187,188).

This study reveals that although there is some form of a formal curriculum at the University of Nairobi, the main way of inculcating professionalism is the traditional method of role modelling. The formal teaching is performed in 'year two' of undergraduate studies and is never repeated. Also, the course mainly teaches medical ethics and not necessarily the tenets of medical professionalism. It is conducted by those who do not interact with students in their clinical areas, hence those who teach it may not be a role model on what they teach. The course also emphasizes medicine's intersection with law. Formal teaching of professionalism has been suggested to help the student build their cognitive domain on the need for behaving professionally, and the implication of behaving otherwise (39,174).

Situational learning requires that the student be given a context of practising what he has learned, and it is better role modelled by those who teach it (41,126). This is clearly not seen

in our context. The partcipants stated the haphazardness of the teaching of professionalism, that it was taught in earlier years and not repeated, and that it was done by non-clinicians who could not be role models of what they taught. This situation may explain why even the role modelling may be failing, as is explained by the statements from teachers and students. Cruess and Cruess in their advocacy for the teaching of the cognitive base emphasize the importance of providing opportunities to apply the principles, in order to bridge the gap between "knowing what" and "knowing how." The students then begin to think through and reflect on the principles(39). An integrated formal curriculum should be designed in such a way that professionalism is taught every year in a relevant manner, and can be modelled by the instructors and reflected upon by the students (39,174).

The challenges of increased numbers of students as compared to the number of teachers, changing societal values and the character of the individuals have rendered the role model ineffective, though most of the participants agree that it is the most common way of teaching professionalism. The definition of the role model in the medical literature is a person considered to be demonstrating a standard of excellence worth being imitated (121). Jochemsen-van der Leeuw *et al*. (120) in their review of the literature on qualities of a trainer that fits a role model found that there are positive and negative role models. Positive role models were described as clinicians who were excellent in their relationships with the patient, inspirational in their teaching, and handled their tasks with integrity. The negative role models were uncaring towards patients, unsupportive of trainees, impatient and cynical. Congruency of words and actions is an important point in role modelling, and that is perhaps the biggest problem in this study context. When the congruency is lacking, it breeds the informal curriculum and the hidden curriculum (156). This may lead to cynicism setting in; students are known to come to college with an ideal of how they should behave, but as they observe senior colleagues and learn from the hidden curriculum, they become pessimists (90,156). This study points to similar issues at the University of Nairobi where it was carried out.

Changing societal values imply that there are few shared values between the older and the younger generations, if any. This was demonstrated in our study by the manner in which the juniors explained their view of respect, that respect is two-way, while the senior consultants demand respect that is acquiescence in nature, without reciprocal demonstration. This is demonstrated by the harassment of the junior during the ward round, something juniors seems

to dislike. This naturally lends itself to difficulty in role modelling, which then is reinforced by discipline and regulation.

Professionalism has long been known to be 'caught' within a community rather than taught. Socialization as a way of learning is well recognized (17,145,146), and what is different in this study is that the socialization is not a reflective one. The social groups talked about are parents, religious circles and peers. However, one of the current ways of enabling reflection in teaching professionalism around the world is through group work, as in the appreciative inquiry of Indiana University, or the Taiwanese method of having workshops for teachers and students alike (146). The development of the instructors in order for them to know their role as the mentors, as well as institutional support with resources may ensure long-term success of the program (39). There is a need to modify ways of learning to that of reflection through group work that builds a community of practice, in which all disciplines are appreciated and respected (145). We do not have these groups to enable reflection within the University of Nairobi.

The lack of clear curriculum that is integrated and taught throughout all classes in medical school may in the end lead to informal and hidden ways of learning professionalism. The lack of clear curriculum has led to participants learning to think of professionalism as mainly learned from home, peers, religious conviction and media. It may point towards a lack of interaction between faculty and student, or lack of formal ways in which professionalism is taught. In a study in Kuwait, books and literature were listed as least helpful in the teaching of professionalism, followed by family and peers, which is similar to our findings in this study. In that study, there was no mention of religion as one of the ways of learning professionalism (11). The reason for this may be because religious practices in that part of the world are part of the culture, thus one may not relate any learning of professionalism to be specifically tied to religion; and also because these ideas have been largely discussed in Western literature, so it is possible that they would only know it through reading.

In the University of Nairobi, it seems other methods that have been employed in teaching professionalism in the Western world such as small group discussions, standardized patient interactions and self-reflection papers, are not yet in use. This may be because of lack of awareness of the need to teach medical professionalism explicitly, since it is assumed to have taken place through the presence of the role model as well as through disciplining, such as punishing those who do not wear appropriate attire.

The cultural influence on the way medical professionalism is being is demonstrated is in two ways; one is through the culture of the institution and the community, hence the hidden curriculum. The student learns what professionalism is through what they see and hear in the halls of residence, through the corridors, and outside the normal teaching enviornment. Some students felt that the teachers were taking more time in their private clinics with patients than they did with public patients. The student thus learns that the most important issue is making money through having a private clinic, with the public patient eventually getting neglected.

While students come to medical school with a lot of idealism, commitment to becoming good doctors, and taking care of the patient, they at times seem to lose this through the education process in medical school in what has been termed hidden curriculum. The hidden curriculum has been defined aptly by Lempp and Seale as "the set of influences that function at the level of organisational structure and culture including, for example, implicit rules to survive the institution such as customs, rituals, and aspects taken for granted." (149).

A number of studies have identified six learning processes of the hidden curriculum that students at any level adopt: they tend to lose the enthusiasm and the ideals they entered medicine with, they become emotionally neutral, there is a change of ethical integrity, they accept and adopt hierarchy, they go through the emotions of becoming a professional in a ritualistic manner, and learn the less formal aspects of being a good doctor (147,151–154). This is what is likely to happen when no strong curriculum is structured in a situational learning context with excellent role models. While the processes may not occur in every situation, it is informative especially in contexts such as the University of Nairobi where there is no formal curriculum that is known and integrated. The six processes, though not the focus of this study, could be seen in what students said. They thought of themselves as becoming respected members of the society, but that it was not seen, and they were struggling with the hierarchical nature of respect, seeming to learn what a good doctor is from informal ways.

The second way in which culture influences learning is by way of respect for the old systems left by the pioneers. These systems in the view of the senior consultants produced professional doctors in the past. However, that past has been overtaken by a generational change in values, and increased numbers of students.

One of the ten responsibilities of professionals according to the Physician's Charter is that of commitment to lifelong learning (75). Lifelong learning requires a deep learning style. This is often seen in a culture that is inquisitive, and where the power distance is much less than is seen at the University of Nairobi (26). The contextual culture as discussed earlier is that of short-term orientation. This can be viewed in the way the curriculum for professionalism is structured in one year with little else taught during the rest of the programme. This then breeds an institutional culture that does not encourage professionalism to be learned. Hence, any approach to learning professionalism will be at best strategic, but would more often be superficial learning. It therefore means what they learn will not be retained for the long term, and there may be no commitment to it once they get the title of "doctor".

The movement towards professional identity formation has led to a myriad of ways of teaching professionalism worldwide (17). However, this is in addition to role modelling, relating to socialising people to what they ought to be. In this study, the finding is that the old methods endure, without addition of the other methods known elsewhere in the world. It is agreed in other parts of the world that there is need for a formal curriculum across all the years, with relevant and appropriate ways to model it (17,39). This has not been instituted in our part of the world. Mentorship groups that could be used to teach professionalism as is done at Universities of Indiana and Washington are an example worth emulating (160,161).

In summary, the methods of learning professionalism at the University of Nairobi at the time of the study were mainly role-modelling and a short course in the formal curriculum on ethics and the law. The role-modelling is a form of mentorship. Because there seems to be no assessment, with resultant a lack of emphasis for the student, professionalism was suggested to be learned from other sources that include unreflective social setting, literature and media. Some of the newer methods of learning professionalism that are found elsewhere in the world do not exist in our context. From the literature, there are methods that would be culturally relevant and have a perspective to teach professionalism in a suitable and context-specific manner.

5.3 Challenges in teaching and practicing professionalism

This section discusses the challenges that the participants thought to encumber the teaching and practising of professionalism at the University of Nairobi. It will look at the unique challenges and compare them with what is known in the literature.

Inculcation of professional values in trainees and its sustenance in practice requires a culture that enables it, and where positive modelling is routinely practised. One of the major threats to the teaching and practice of professionalism today is the disintegration of the education communities, which then will hinder transmission of values and behaviours (155). This study indicates that there are institutional issues as well as personal character that demonstrate lack of cohesion; hence transmission of values may be hindered. This is demonstrated by the expression of faculty that thought that most people are not found where they are employed, students and patients indicating that at times the consultants are not available, and that nothing has been done to rectify the situation. As suggested by students and faculty, there are no forums where all the surgical community meet to discuss issues affecting them. Lack of camaraderie is seen in the way juniors are handled by the consultants. This then hinders transmission of values because people live in silos.

This study reveals that at the core of challenges is the attitude of the individual. This was mentioned several times by the focus group and key informant interviewees, and confirmed in the survey. Many studies demonstrate that most often there will be a character issue that manifests in the surgical community regarding abusive surgeons (108,146). The reports from Uganda indicate students receive much verbal abuse (82), so was our study where juniors felt that sometimes the registrar would receive verbal abuse in front of the patient the were serving. Furthermore, when Whitmore was the chair of a conference of program directors, he communicated that an environment that copes with an increased workload, reduced reimbursement, and high liability rates, may encourage unprofessional physician behaviour (108). The same issues have been raised in this study where doctors moonlight for purposes of increasing their take-home money, thereby becoming overworked voluntarily. Though one may argue that they choose to overwork, in their view, they do it as a necessity.

The Ugandan study (82) and ours were both research-based, and in our case the excessive workload was compounded by the staff having to cover multiple sites. Character itself has

been mentioned as a base where the other 'excuses' can be given as reasons, one of which is that of personality and regional differences (7). In a study by Chandratilake *et al.* (7), there was evidence of geographical and regional variation in attitude and beliefs that constitute professionalism, and this might also explain the main finding in our environment that shows our attitude or character flaw about patients in difference practice set-ups. The results suggest that most physicians in the education community will treat a patient in private practice better than they would in the public sector (108).

Culture has an influence on the personality of an individual, and this will affect their emotions, cognition, and motivation (192). This may affect the way physicians behave since they feel no personal responsibility in a collectivistic society, but would rather not oppose what others are doing (192). They are influenced by the behaviour of others rather than consistency in the arguments (192). It therefore goes without saying that what others do, right or wrong, influences everyone else. Personal growth and self-esteem is not something that is highly valued in collectivistic cultures (192).

Inadequate resources also have a major impact on the performance of ethical practice in light of current evidence-based surgery. A study in a similar setting in Uganda's Makerere University revealed similar results where there was a suggestion that developed-nation practice standards might not be similar to developing-nation standards in the practice of professionalism (82). Standards of medical care might be lower in developing nations than in affluent ones, but the personal moral qualities of health professionals might be expected to be similar in both. One of the reasons for apparently lower standards shown in this study is poor infrastructure. For example, lack of curtains may prevent a physician from observing privacy, and lack of required instruments will cause disillusion. Consequently, some opt out to go to private facilities where the infrastructure and equipment are available.

One of the main reasons for complaints from patients, as stated by the MPDB legal representative, is the communication of health care workers with their patients. We found from the interviews that this at times depended on the socio-economic status of the patient and the nature of the clinical care setting in which the patient was seen by the physician. The majority of litigation has arisen, not as a consequence of a lack of technical skills, but from a lack of the soft skills that constitute professionalism (7). Communication may be a problem because many physicians have not taken into account that the education level and the informational needs of

the population may be changing in a digital age. It might also be an indication of an unchanging attitude of the surgeon towards the patient.

In Flexner's model of clinician-teacher-researcher, whereby each would generate income from his or her work and put aside their personal interest, is difficult to achieve (105) as illustrated by the findings in this study. The teacher moonlights as well as the trainee, meaning very little time in academic work for both. This further illustrates the effect of commercialization on medical care, where it is seen as the source of income rather than a gift to help alleviate suffering; neglecting to follow the vision expressed in the Prayer of Maimonides "in suffering let me see only human being" (114). Commercialization means that the teacher has less time to teach, but also in our context that those who cannot afford or are of low socioeconomic status get less time and poorer service from the doctor.

This study reveals that the personal interest of the doctor often overrides that of the patient, as was agreed by 61.7% (Table 20) of the participants in the survey. This has long been known as part of the forces that drive entrepreneurial professionalism at the individual level and has been historical (88,101). There is an indication that much of professionalism discussion has been towards protecting the *nostalgic* professionalism from the influences of *entrepreneurial* professionalism (57,101). The influences are further seen in the aspects of pharmaceutical companies giving gifts to doctors as a way to influence their decision, as was reported in Estonia (212). Though the aspect of pharmaceutical companies' influence was not found in this study, *personal interest* that may include financial gain is an indication that such an issue may be present within this context.

One of the institutional weaknesses that were recognized as a challenge is poor disciplinary measures, as a form of accountability. Where there is inadequate self-regulation, self-interest thrives. And this was one of the reason why "organized" medicine failed to ensure that practitioners were in the position of being trusted in the USA (88,101). Personal interest may easily lead to greed, and may lead physicians to moonlight in the private sector at the expense of learning and care of patient in the public facilities.

At the societal level, there is what the participants referred to as a culture of impunity, referring to weak institutions who fail to deal with those who err. The tendency to look after one's own interests is especially strong in the young, who observe their rich senior colleagues

succumbing to corruption and bribery. For example, in a recent survey, the youth stated that they would not mind being corrupt if it would make them rich (214); some of the doctors are being bribed to send their patients to India (210). The influence of corruption occurs similarly in many low and middle income countries (212).

Recognition of the doctors' work, mainly by remuneration as well as in society as a whole, tends to value those who prosper, and runs contrary to good professional practice. Lack of recognition of the clinical work of doctors has been shown to be a major challenge for those who want to concentrate on caring for the patient (114,115) because, in some institutions, publication and research form part of what administration uses for the promotion of personnel. This happens in our environment too, although the recognition spoken of in our study was more societal than remunerative.

5.3. Challenges in teaching and practicing professionalism

The challenges that were not mentioned in our study include; medical technology reducing contact with the patient, contact between trainee and trainer, an academic reward system placed on publications rather than aptitude, and finally disintegration of the education community (146,204). However, as we develop, we need to be aware of all these as they may eventually surface.

These challenges could be brought about by the values that people bring with them in medical school, as seen in the results section whereby some are interested in medicine as a business. It could have also resulted from the lack of teaching, hence the display of lack of integrity, poor delivery of quality of care and lack of accountability. Moral character of individuals may explain the issue, given that these challenges are not displayed by everyone who go through school of medicine, University of Nairobi.

In summary, this study found that the greatest challenges in the practice and teaching of professionalism in our environment are to do with the character of the individual and inadequate resources, which are further compounded by issues such as lack of regulation and the dominance of personal interest. The challenges are common to other low and middle-income countries, as well as some of the high-income countries. In the next section, I will look

at some of the suggestions that the participants gave which would overcome the challenges in order to effectively foster professionalism at the University of Nairobi.

5.4 Suggestions on how to overcome the challenges and foster professionalism at the University of Nairobi.

This section discusses the question as to how to overcome the challenges and effectively foster professionalism at the University of Nairobi. It will discuss this comparing what is known about best practice in fostering professionalism, within the context of the challenges. What new concept emerges, or what old theories fit?

Medical schools the world over are dominated by curricula based on the objective sciences, and this forms the foundation of what medical students have always thought makes doctors (72). Because of this focus, the teaching of professionalism as seen in section 5.2 above, has always been that of apprenticeship, but we know that this has its limitations in the hidden and informal curriculum (42,188,189). Furthermore, in Kenya, the lack of learning professionalism has been demonstrated in the newspapers articles that bring into sharp focus the erosion of values among the practitioners of medicine (34).

Our context is faced with three-fold challenges in the teaching and practicing of professionalism; lack of resources, incongruence in morals, and lack of a clear formal curriculum. Therefore, the teaching of professionalism is left to the informal and hidden curriculum. The other challenges that have been experienced in the context of inculcating professionalism include admitting students based on academic excellence alone. Commercialization of the medical career rather than seeing it as a calling is another major challenge. This challenge is linked to another where the doctor's decision with regard to the patient's intervention is controlled by a third party. These challenges are not unique to Kenya, as already noted.

The challenges noted require a reflective solution that would help turn them into opportunities for the surgical community. The discussion carried is therefore not just reflective on the problem and why the problem occurs but also how it should be solved. This involves some form of third-loop learning. That is the idea that this section focuses on; how to overcome the

challenges in order to effectively teach medical professionalism in medical school of the University of Nairobi.

Lave and Wenger's community of practice theory on how learning takes place in a social context has been a major driver for the third-loop of learning professionalism, even though it has a weakness in the influences of the hidden curriculum (42,189,203). The hidden curriculum, however, is not always a weakness. When it was first applied to education by Philip Jackson in 1968, it was seen as a network of institutional values, rules and assumptions that were as important in shaping the character of the individual as well as the formal curriculum (185). In his book *Life in Classrooms* he is quoted as saying, "It is certainly possible that many of the valedictorians and presidents of our honor societies owe their success as much to institutional conformity as to intellectual prowess."(185). Thus, in a situation where there are people of character, and in a community that has the values and an enabling environment for professionalism, the hidden curriculum itself would be as important as the formal curriculum. (185). However, most of the literature on the hidden curriculum is negative. Therefore, in this study, critical thinking and self-perception as theories could be engaged to help the community make changes in order to effectively improve the implementation of professionalism.

This study took place in the department of surgery where the influence of the newer understanding of medical education has not yet had an effect. However, in this study, a formal curriculum was proposed that would address the deficiency in cognitive aspects of professionalism. The view was that the curriculum should be a blended one, with a reflective group that would combine medical students, faculty and residents. Cruess and Cruess began by stating that professionalism must be taught with the main aim of adequately raising the awareness of the students, so that they can reflect on what it is they have to do and be (37). This was suggested as a well-structured mentorship program for small groups that would aid with reflection on this issues, similar to groups such as those of the Relationship Centred Care Initiative of Indiana University (139).

Raising students' awareness should begin with faculty development, as suggested in this and other studies. Embedded in the old tradition of Osler and Halsted, where active learning took place as students interacted with supervisors in the clinic and wards, was the idea of values shared by the students and the teachers. This makes the education of the students easier. In our context and demography, however, teachers and students may not have shared values due to

differences in age, religion or race. We are in a global world where people from everywhere interact, thus values which were never part of our culture easily find themselves being a part of it. Because of this, it has been suggested that professionalism be explicitly taught so that in order to make students aware of the cognitive base of the values (146,204). This was suggested in this study.

One of the ways of sustaining values in an organization is through regulation: the community of the practitioners recognizes this through self-reflection on the unsatisfactory outcomes that they get, and the disciplinary experiences in the hands of the regulator. The medical sociologists have long debated the place of self-regulation of organizations, and how it helps keep the trust of the society in the individual professionals. It only works because they trust the organization to enforce regulatory measures to correct individuals who violate the values, norms and rules of the organization (63,88,89). The regulation, however, should be structured in such a way that it begins from medical school, rather than the current one which only begins upon completion. Other schools have introduced committees that monitor compliance to professional standards within the school (179). This is perhaps what was being suggested by the participants. This study indicates that regulation of practice and of learning may help create a situation where practitioners are forced to reflect on their actions or omissions.

While regulations exist, the way issues have been handled seems only to make the community think that professionalism is not taken seriously because the regulatory bodies appear to protect the doctors rather than look at the interests of the public. Furthermore, regulation as practised in other jurisdictions not only includes penalising unethical behaviour when it occurs, but also regular assessment of the clinicians' skills (175). The regulatory bodies play a critical role in ensuring those who are admitted are qualified, their teaching is up to date, and the final assessment is of quality (176). Improvement of the educational environment was suggested as one of the ways in which individuals could build an educational community.

The institution that appreciates hard working members through non-cash or cash rewards, and organizes informal gatherings where members feel free to talk openly and play with each other, fosters networks that go a long way in enabling professionalism to thrive. This was suggested in this study but was shown in the literature on professionalism as well (164,165). The enabling environment may also require a specific designated teaching hospital, as opposed to using a parastatal hospital to teach. This is because a shared hospital engenders difficulties of lack of

shared values. The student-to-faculty ratio is part of an enabling environment, and should therefore be reduced to a number that can foster close relationships by improving the ratio in order to enable that reflective activity (56,60).

Both teachers and students alike spoke of the need for an enabling environment regarding facilities for teaching and learning, but also one where the focus is not only on academic grades. Some suggested forums where students interact amongst themselves as well as with faculty so that they get to know one another outside the class rooms. The faculty also suggested the need to interact among themselves. It is crucial because the way the society socializes dictates what values are picked up by the young for their personal frameworks (146). How active an educational community is will be crucial to the learning of professional values.

Practising and teaching in a public hospital in a developing country has its limitations. There have been certain times when patients are not able to afford the care, leading to a suggestion of universal insurance cover that would protect one from missing care because of lack of finances or resources. This lack of resources, especially in the public hospitals, has been an excuse to neglect the patients in this sector in order to practise in private hospitals where the resources prevail. It is also possible that if health care financing were to be structured in a way that catered to everyone, the divide along social classes would be reduced. Additionally, structured health care financing that brings resources to the hospital will ensure the presence of the faculty in the hospital, hence increasing the interaction between patients, trainees and trainers. It can potentially increase the learning of values, as the senior doctors will be more likely to remain available to public patients rather than withdrawing to their private practices. Structured health care financing may also reduce the burden of pay on the government for salaries. This could happen if every institution is autonomous and works like a private hospital. They would then be able to pay their staff, and in the process reduce the chances of industrial action that force the government to increase remuneration. Proper utilization of resources by reducing wastage and corruption was suggested as a way of dealing with poor resourcing in our context, as well as better remuneration of the health care workers.

The reward system was also proposed as a way to motivate staff. This reward does not necessarily need to be financial, and can be used as an incentive to both the students and the staff to increase professional behaviour and sustain it. Two practical ways have been suggested in the literature. First, national humanism in medicine awards given by the Association of

American Medical Colleges (AAMC), and secondly the Arnold P Gold Foundation and Health Foundation of New Jersey (164,166) giving points for promotion and the educational Relative Value Units (RVUs) for excellent role modelling (165).

This study had suggestions of further rewards such as giving mortgages at cheaper rates, health insurance, research grants, and scholarships that could provide further incentives to strengthen and foster professionalism. In the case of students, the reward could be by improving their assessment or by enlarging the areas to be assessed. For values to grow and mature, they need time as well as availability of the supervisor to observe and evaluate them (167). The surgeons who are meant to be supervisors often hardly have time, and are frequently unavailable in the ward to assess the student (168). When they do assess, they are likely not to be candid with students on their feedback (169). Some are not candid as a cover up for their absence, and others because they are unaware about how assessment in such areas should be performed. Hence the need for faculty development in these areas (170,202). There may be a need for explicit grading of professionalism that has consequences, and it needs to be in practical areas (134).

The study also found that one of the problems is the increased number of students, with no corresponding increase in the number of faculty or teaching facilities. This makes the environment congested, and was suggested by some students as being "not good for the patient and practitioners." The increased numbers also reduce interaction between supervisor and trainee. It was proposed that investments need to be made to create a separate teaching facility as opposed to the current one that is shared, and that has particularly different visions and missions. It is difficult to have common values or vision with two different administrative structures supervising two distinct streams of workers. This refers to the situation whereby University of Nairobi workers are answerable to the University of Nairobi, while those of Kenyatta National Hospital are answerable to the Kenyatta National Hospital administration, yet both work with the same patients. The environment needs to be one that both student and faculty feel safe to share, an environment not controlled by third parties or another administrative structure, an environment where they can have reflective practice and not be hurried (56,60). This may mean a reduction in the number of students to match the number of teachers, or increase faculty as well as building a teaching hospital.

In summary, the surgical community suggested a formal curriculum to teach the cognitive basis of professionalism, small reflective mentorship that includes faculty, registrar and medical students, proper regulatory mechanisms, social events, leadership, among others. While these suggestions are widely supported by the literature, they are transformative in the context in which they were given. Even though they had no formal exposure to medical educational theory, they were describing Lave and Wenger's community of practice, Mezirow's transformative theory and Chapani's self-perception theory.

CHAPTER 6

6.1 THEORIZING THE CONCEPT AND ITS IMPACT

This section sought to answer the question, "Why is professionalism perceived the way it is at the University of Nairobi?" We will discuss this using ideas from the data that was collected as well as ideas from culture that may explain why the concept may be the prevalent one, and use literature to seek whether such concepts are congruent to such cultural context.

This study sought to explore the conceptualization of professionalism by the surgical community at the University of Nairobi and Kenyatta National hospital. It also sought to establish how they teach and learn professionalism, to assess challenges facing those learning and practising professionalism, and to seek ways in which to overcome the challenges so as to effectively foster professionalism at the University of Nairobi. The underlying theoretical framework for this study was that professionalism is a social construct, whose conception is influenced by culture and the philosophical beliefs in one's context (12,229). Further, data for consideration was collected from the learning environment as the unit of analysis. The data from the learning environment therefore provided a window to investigate the prevalent concepts. I chose the surgical community because as the principal investigator, I was part of it, and would be able to interpret the concepts with understanding. By the time of the study, I had been there for 3 years and may 'not' have had 'strong' inbuilt biases. I would have understood the environment, but still fresh enough to be objective about the concepts. Self-perception theory looks at how participants choose to suggest solutions that they think will help, amidst the challenges found within their context. Further, the pervading influence of the culture can affect how professionalism is learnt amidst the challenges and will also influence how the participants think of the instillation of professionalism (26). I chose to use an exploratory strategy of sequential mixed methods to enable me to assess the concepts.

I referred to our cultural context in Chapter 2 as having a high-power index and being a collectivistic culture from Hofstede's cultural constructs. An affective domain emerged as important in our study when considering learning and excellence of service, the quality of care is a cognitive and psychomotor domain .Other studies that have looked at professionalism found this too (116). Respect was widely mentioned in the interviews we conducted. Having been in the interviews and heard the partcipants, I chose to go with the "strongly agree" score. While "strongly agree' has no quantitative difference with 'agree' score, it does have a

qualitative difference. Thus one can say the participants who choose “strongly agree” were not hesistant and hence have a qualitative edge on those who just ‘agreed’. This is my view as one who was particpating in the interview. I would therefore say that respect was strongly affirmed during the survey as one of the best behaviours that depicts professionalism. The study showed that participants wanted to see respect in relationships at every level; doctor to doctor, doctor to other health workers, doctor to patient and senior to junior. However, an underlying frustration expressed on the part of the nurses, nutritionists, therapists (occupational and physiotherapists) and even consultants is that respect seems to be missing in these relationships.

This can clearly be seen in the challenges that are experienced in the learning, teaching and practice of professionalism. The main challenges implied by the participants were a deficit in moral fibre and inadequate resources. Lack of character would explain the lack of respect that the community yearns for. As explained by studies of respect and integrity, it’s hard to have respect without values and integrity (231,232). In discussing what respect for patients means , Beach *et al*.(234) state that the object of respect should be the patient and their value of being human, and not just the choices they make because of their autonomy. They also state these values should be practised by believing in them and being acted on accordingly. However, doing that requires moral character (232). The challenge of character is illustrated by doctors who take time with private patients and treat them better than they do public patients under their care.

When the context of a collectivistic culture is considered and its challenges identified, there is a pointer to the nature of the challenges and why we continue to struggle with them. Collectivistic cultures tend to use shame as opposed to guilt. Shame is more related to losing external face with the community while guilt has to do with moral standards as set by the individual. Guilt, if societal, is enshrined in law as is common in an individualistic society where the individual takes responsibility (232). In a collectivistic society, since it is the community that sets the standards and not the individual, one would say that respect by the society is far more important for the individual than the individual’s moral standing. This can influence the practice of professionalism if the society is in transition to individualistic from the traditional African collectivistic systems, where support for others is the norm.

The transition may not be uniform in all areas. Some, like valuing group interest above individual, may be at held in tension to that of the individual. The effect of that tension is seen

when a society values people with resources regardless of their personal and work ethics, and the impressionable young people may want to copy the most respected individuals in society. This is seen in the attitude of Kenyan youth from the published report in the newspaper (214). This may mean that people may be committing unprofessional behaviour, but because they will have the resources in the course of time, as doctors, they will still have the respect of colleagues and patients because they are famous. Conceptualization of professionalism as respect has its cultural underpinning as the opposite of shame (232). It may imply the importance of public perception with implicit pressure to promote the right image, enhance status, inspire trust and confidence in the ability of the professional.

In a country with inadequate resources, every working individual is faced with the pressure of providing for not only his family but the larger family, especially in collectivistic cultures. When that individual is in the medical profession, they may not see the work they do as a ng but as their main source of income. The implication of thinking of the profession as a career may mean not seeing patients as individuals who require respect, and may bring about the differential treatment of a patient because of socio-economic status, including having an orientation towards impersonal standards of excellence and work in an occupational system as opposed to a vocational one. In that kind of system, one may think of following the profession as a means to economic progress (113). The goal changes from participating in the community to being successful, the definition of success being status and wealth (234).

Communication as component of professionalism as stated by the participants during the interview has cultural aspects and patterns. There are two major patterns of communication; either low-context where one is explicit on what they need to communicate (whether bad or good) like in the Western world, or high-context in the Eastern world including Africa where one needs to communicate in a way that hides most of the bad news, and sometimes even the good news (235). Our way of communication then should involve studying the context. The only conflict is that in this time of transition, most of the younger generation would like explicit communication. The juniors actually thought there was no explicit communication, even when patient management protocol differed from one consultant to the other, leaving them stranded. They get stranded because they respect the consultants and do not like to explicitly ask them what they should or should not do in that case. They tend to agree to every suggestion by every consultant without question but fail to act, hence reducing quality of care.

The learning of attitudes in such an environment when not clearly stated in a curriculum can be precarious because everyone will be covering the shame of everyone else. It will be difficult for both teacher and the learner to give honest feedback (236,237). This then gives room to learn values from unintended sources; sometimes unintended values are learned from the institutional values and systems. Despite what could be considered to be explicit requirements for respect by society and medicine, impressionable learners experience the opposite attitude in the wards with behaviours and comments that finally become what the students learn to be the identity of a doctor. The other places in which learning took place for some of the study participants was at home, in religious institutions and from television series. This variety of learning implies different thoughts and practices in-so-far as professionalism is concerned, with the main idea being that which is cultural as we can see in this study.

The one-year learning of medical ethics may not help in such a situation. A situational curriculum that tracks student's professional development from pre-clinical to clinical years with appropriate content and role modelling has been suggested in this study. Included in the methods of teaching professionalism are appreciative inquiry, experiential learning and the use of reflection, in the formation of a community of practice (17). Lectures like the ones given in the current curriculum are concerned with what the student should do or should not do; they have been shown to have the least impact on the student, and it has been said to force students into a straitjacket of political correctness (130). Even where there is respect for elders, with no deep-learning approached for long term retention, it would prove not helpful. The participants suggested that situational learning, where learning takes place through the presentation of knowledge in authentic contexts with appropriate scenarios, has been found to be better (238).

Some of the examples of unprofessional behaviours by the respondents illustrated the inadequacies of the current system for learning professionalism, and perhaps the behaviours of the doctors who have recently graduated from the system indicate that it should have been altered some time ago. The culture of respect can also translate to respecting systems that have been there in the past. This could lead to leaving intact ways of teaching that have been overtaken by time. Whereas some of the contexts from which we derived our method of teaching professionalism have changed, our teaching methods have remained the same over the years. We, therefore, need to change, and that change should reflect our context.

The suggestions that were offered by the participants to overcome challenges and effectively teach professionalism include an enabling environment, character building, creating a community of shared values, and recruiting faculty or admitting students with good aptitude. As was indicated earlier, medical education is in the era of triple-loop learning of professionalism, a period where everyone who intends to join the profession should be reflective in what they are becoming, as well as cognisant of the fact that they are involved in a community of practice (146,236,239). Building a community that is reflective would require respect for each other (240). The cultural environment in which respect helps build strong foundations for professionalism is important. If the cultural environment is that which is hierarchical, and financial power is what attracts respect, it may not enhance professionalism. From the study results, there is a glimpse that the participants want to move beyond what the environment offers to that of reflection on what they are becoming. Character formation will require development of a curriculum that is inclusive of reflective practices and formation of a community of practice.

While relationships defined by respect are ideal and bolster trust amongst the people involved, the respect should be within a framework where honesty is also at work (232). Cultural respect may bring into professional practice the difficulties of genuinely sharing with the patient the honest truth about their prognosis, because the doctor either still wants some respect or does not want to hurt the feelings of the patients. It is because of this that character formation through transforming teaching methods is suggested in this study through various strategies. In building a community of practice, one of the important ingredients in terms of character to sustain it would be respect within the community.

The formation of an individual into the profession takes time and is an acquired state rather than a trait (69). The process of acquisition is from recognition through cognitive initiatives to reflection by the individual on what they are becoming. It requires an enabling environment, because the learning environment that includes the behaviour of individual faculty members as well as the institution's policy and activities will clearly affect both the residents' and students' views of the importance of values and principles in medicine (241). Any incongruences will need to be addressed, and may be better done by a committee. The environment should be one where there is respect for each one and people have shared values and common goals; goals which are altruistic in nature to enable professionalism to take root (241). This study though had not found altruism as something that is common. Even when asked directly in a negative

rendition about personal interest, majority (61.7%) agreed that one of the challenges was that doctors value personal interest above their patient's. Respect, however, is a value that was prevalent among the participants.

The suggestion that could improve that environment begins with how the students and faculty are selected. In most universities in the Western world, students who finally come to join medicine undergo an interview and entry examination, apart from having their grades assessed (242,243). This could be introduced in the University of Nairobi as a way of choosing those whose interest is above money, and can be the beginning of having people whose purpose is one and whose values can be moulded into professionalism. Good attitude from the beginning will help in getting students who can be taught professionalism (159).

Faculty development is at the heart of improving the environment and developing people who can foster professionalism through character formation. It is fundamental in empowering educators to teach professionalism and promote institutional values and policies in-so-far as the field is concerned. The reason for this is that it has been noted that some faculty members are not competent in teaching professionalism as a content area, and may be unable to articulate and demonstrate the attributes and behaviours within their course (80,129). In a setting of traditional content-based teaching, the teachers may be keen to just cover the material with very little time for reflection; hence the need for faculty development (129). The change could begin with bringing the faculty together and helping them know the values they share as is pointed out in this study. Respect then becomes a fundamental foundation upon which other related values would be based.

The student-faculty ratio is part of improving the environment, and it has been suggested that the ratio is currently so high that it inhibits proper apprenticeship and role modelling. It is not possible to focus on individual students and patients and embody what is required of a good role model for the development of professionalism in an environment where a single faculty member has about 30 students that she/he is mentoring/teaching. This is also a result of the nature of the practice where patients admitted to the hospital are not specific to any faculty member, but are instead admitted as generic hospital patients. This means that the faculty is not obliged to take care of any particular patient till they are discharged. The care of the patient is done by the registrar; the supervision being performed by any faculty who comes for the ward round, with no specific faculty being responsible for the patient.

It is, therefore, difficult for the student to observe a single surgeon care for the patient from admission to discharge. This can only change in a hospital owned by the University as was suggested by the participants, because the University cannot dictate to the Kenyatta National Hospital what they ought to do. The faculty-student ratio is very low, 3:100 compared to, for example, schools in the United States whereby the faculty: student ratio ranges between 1-2:1 and 12-14:1, meaning that there are more teachers than students, the majority of the teachers being volunteers (244).

While role modelling is different from mentorship given that in the latter it is formal and known, at times the role model does not know that he or she is the role model for the student (241). Role modelling requires people with a particular character, because research has shown that those who are considered positive role models have not only excellent technical and teaching skills but can interact with students and patients in a way that demonstrates a particular character (120). Mentorship, on the other hand, can be informal and formal. Informal mentorship involves students and faculty who connect outside the framework of the official school program. Formal mentoring occurs within the mentorship program of the school.

Informal mentorship groups fare better in influencing career satisfaction and other areas, perhaps because they are not mandatory, thus reducing formality between mentor and mentee (245). In this way, mentors can act as role models who are guides for students' personal and professional development over time. The mentors can be instrumental in conveying explicit and implicit messages, hence dealing with the hidden curriculum in medical schools. They also deal with relationships and other extra-curricular activities that make the stay of the trainee comfortable, and enable them to learn more effectively (237,246). Though I have stated that informal mentorship can act as role models with some benefits, it is not without limitations. Some studies have shown, however, that role models may not be a reliable way of imparting new values and ethics because people tend to choose individuals who already share the same values as them, thus lessening the opportunity to learn new values (247). It is therefore incumbent upon the school to teach professionalism in a way that imparts values.

Character formation requires mentorship in a group where reflection can take place. The students and faculty see their activities, and how their activities reflect who they are and whom they ought to be. Reflection would help both staff and student play a role in the character formation of each other, see the value in each other and respect each other more (243). That

kind of practice would further enable teamwork and team learning, which is one of the present methods of teaching in the world of medical education (248,249). When learners gain ownership of the process and act in collaboration, they will be able to explore, compare and integrate different perspectives of professionalism with increased understanding and coordination with others (250). However, it is important that the supervisor be present in the group, in order to guide the exploration and help the learners question and argue for the relevance of what they are learning and contribution of each other (250). The supervisor in this instance would be the formal mentor of the group. Supervisors, however, are by nature task oriented, for example, they would like to complete a thesis or dissertation, whereas mentors have a long-term orientation. In this instance, the supervisor could be a mentor to help in the character formation of the group of students. Regulation has two main roles; to provide minimum standards in terms of conduct and to sanction when the standards are broken. It has been a way of ensuring the values of conduct of members are within the norms (88,89,251). In this way, regulation helps in forming character by ensuring that everyone follows the same rules. It is a way of helping people reflect on their actions as relates to the values of the organization. In this study it was described as one of the ways that enable the student to see what the institution explicitly thinks is important. It can be viewed as making the individual reflect on his action afterwards when confronted with his "sin" of commission or omission.

Traditionally, professional bodies are meant to self-regulate, and they still do. This self-regulation begins in medical schools , with rules and guidelines on what should and what should not be done. In our environment, what came out is that what is regulated in school is mainly to do with attire. It is possible that there are areas not mentioned in this study, but regulation should be seen in other sectors as well. What is important in a school setting is the ability to demonstrate what the institution values; that should include not only attire but behaviour seen or reported, and to show that the unprofessional behaviour can lead not only to transgressors being excluded from class but from school as well, depending on the extent of the misdemeanour.Regulatory professional bodies for those in practice reflect an integral part of professional autonomy. In stating the challenges, one participant said that there were those who "have gotten away with murder" in reference to the manner in which they cared for a patient. The regulatory authority should have the ability to show the public that they do not tolerate any negligence, and that they are committed to thinking beyond the interests of the medical personnel.

A model of professional regulation can be looked at where a mechanism exists that establishes the standard of medical practice and its characteristics (252). These include characteristics and standards in educating, licensing and certifying those that qualify to be in the job market. Further issues of competence monitoring, structure of the employment market whether private or public, payment methods and cost of care can all determine the models. Based on these factors, the model of professional regulation may include full state control on one extreme hand to physicians' self-regulation on the other, and includes state-sanctioned self-regulation in which the institution in charge of formulating and implementing the regulation mechanism is composed of physicians and consented to by the state(252). The Kenyan professional regulatory framework is the latter, where it is state sanctioned in that the registrar of the MPDB is a state officer, and the chairman of the board is appointed by the cabinet secretary in charge of health, while allowing doctors to elect those who would represent them within the MPDB. The regulation could take the form of assessment of the quality of care of policies on the use of technology, of certification and recertification. This would require a collegial practice, where the action of an individual is subjected to the critical evaluation of peers' and patients' opinions. That can happen only in a context of a contract with peers guaranteeing each other's competence to the public.

A collegial structure works best in an environment where people have moral character and behaviour to influence one another by saying and standing for what is right without malice but also without covering for one another (256). In our environment, therefore, we need to think of what we do at medical school to teach or learn professionalism, and ensure we build people of character who then can fully participate in building the character of others when they are out of medical school.

In summary, the data collected through interview and survey suggest that respect is the main concept that is culturally unique to the surgical community of the University of Nairobi. It influences the challenges and ways of teaching professionalism. It affects the way registrars – who are the core to the care of patient – communicate to their supervisors and therefore affect quality of care. This is bolstered by the cultural typologies that are known to exist (such as Hofstede's) with their characteristic behaviours. The culturally unique feature can only be used as a foundation of the curriculum that would be used to teach professionalism with the surgical community at the University of Nairobi.

6.2 CONCLUSIONS

This study reveals a construct of professionalism among the surgical community that leans towards attitudinal and moral concern. Some participants mentioned the psychomotor and cognitive domains of knowledge and quality of care, and the survey demonstrates about 71.3% and 69.1% respectively strongly agreeing that these are important concepts of professionalism. The other predominant concepts mentioned during the interviews and confirmed in the survey are respect, better communication amongst doctors, between then and their patient, and between them and ancillary staff . These relate to the affective domain rather than cognitive or psychomotor/skills. Respect and communication are rated highly in the Kenyan study context, showing the cultural undertones of a collectivistic society.

Most of the components of professionalism as conceived by the participants are actually the same as in other parts of the world. This shows that there is either some convergence of ideas, or that globalization has made it possible to have similar ideas through books and social media. However, in the study setting, the cultural undertone is clearly shown, demonstrating that professionalism is truly a socio-cultural construct. Respect is present in the form of acquiescence to the elder's or senior's point of view. However, other health care personnel (nurses, medical students, nutritionists, and physiotherapists), also required to be respected by the consultant surgeons and registrars for a better working environment that fostered teaching and care of patients.

The study shows that the traditional way of teaching professionalism (apprenticeship) continues to be the major component of teaching in this context, with very minimal formal curriculum. The lack of a relevant formal curriculum leads to some students feeling a lack of emphasis on professionalism. In fact, some students reported learning from television series, which may not teach the professionalism that is pertinent to the environment or even relevant to the medical profession at all. The role modelling or the apprenticeship model that is the prevalent mode of teaching in the study has the challenge of requiring the role model to be available to the student and also being forthright with them. One of the biggest challenges found in the study is that of moral defect in character of role models. This opens the door for hidden and informal curriculum, which may at times be delirious as has been articulated in various journal articles. Deficiency in moral character can lead to many untoward effects that include corrupt practices among doctors.

Lack of resources was not limited to just money, but equipment and space as well. This makes mentor group meetings and optimal care of patients very haphazard in the current environment. Personal character of the individual health care worker is a significant challenge to the practice of professionalism in Kenya. This challenge is also connected to the idea of commercialization of medicine. While medicine as a business could be a noble idea, where the subsystem of *entrepreneurial* professional comes in, it could be mixed up with greed so that personal interest could easily override the interest of patient, as the results show.

The participants feel that the best way to effectively inculcate professionalism is to build a particular character. This should be done from entry into the institution either as a teacher or a learner, and continued in mentorship in small groups that are maintained longitudinally. There is, however, need to build this mentorship model in a hierarchical manner by provision of a cognitive base through a formal curriculum, tackling informal and hidden curriculum through reflection, and challenging the moral fabric through questioning the learner's conscientiousness.

With regard to improving the environment, the study finds the number of students far exceeds the ability of the teachers to implement any effective mentorship program. The mentorship method suggested as one of the effective ways of fostering professionalism requires a limited ratio of students to faculty. With few teachers and a huge number of students, the mentorship will not be effective. However, medical students can still choose faculty and registrars as their role models, from among those who display behaviours that are consistent with what they say. That choice requires a conscientious student.

The need for faculty development was also established as an important missing component in this study. It could be undertaken through workshops and seminars on what professionalism is and how it should be taught and assessed. It could be part of helping the young teachers and the old who may not have been explicitly taught, and therefore have no cognitive knowledge of what professionalism is and how it may be taught and assessed.

Disciplinary actions seem to be on attire alone, and unprofessional behaviour other than this does not appear to be punished or did not come to the mind of the study participants.

6.3 RECOMMENDATIONS

1. Having considered the context and the suggestions of the participants, the development of a formal curriculum for providing the cognitive components requires the development of clear intended learning outcomes derived from the needs assessment. These can be developed through Delphi mechanism, either in a study or through a committee from among staff and students.
2. The development of an effective mentorship program will also require creating reflective groups that will help the students to question their conscience, as well as help teachers question their moral stands and practice. The groups should include undergraduate and postgraduate students, with a surgeon or a group of faculty.
3. Formation of a committee that will design an interview for prospective aptitude for students, be a body to whom reporting and discussion of unprofessional behaviour among students could be done, and make decisions about students who are not improving or conforming to the institutional principles.
4. An enabling environment will require a facility that does not have two sets of administration and two set of vision and mission, and two sets of teachers who do not answer to similar calls. It may thus require the university to have its own hospital.
5. There needs to be the formulation of the curriculum in a way that takes care of the ideas of mentorship and situational learning. The curriculum needs to run across the pre-clinical and clinical years, with each year learning what is relevant for them, with practical examples. There will be a need to develop competencies in professionalism that are expected at each stage, and then to assess these just as knowledge is usually evaluated in the college.
6. The number of teachers should be increased to enable a better teacher-student ratio. If this is not possible, we would recommend a reduction in the intake of students to attain a practical ratio.
7. Need for collegiality among all health care staff for better health care. This can be achieved through team-building activities, workshops, and seminars, on the need for change in the teaching environment. These seminars can be part of faculty development as well.
8. Faculty development through seminars and workshops to enable them to understand what professionalism is and how they could effectively teach it.

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APPENDICES

Appendix 1: List of activities undertaken during the Ph.D. studies

1. Development of proposal
2. Review of the proposal by supervisors
3. Presentation of the proposal to the department
4. Enrolment into the Ph.D. course
5. Presentation of the proposal to the ethical committee
6. Purchase of interview tools
7. Conducting of interviews
8. Analysis of the interviews
9. Development of questionnaires
10. Conducting the survey
11. Analysis of questionnaires
12. Presentation of the results to supervisor
13. Writing of the final book
14. Revisions of the final book
15. Letter of intent to present
16. Presentation of results to the Board of Post-Graduate Studies
17. Defence of the thesis
18. Revision of the book from the defence
19. Presentation to the supervisors for approval of revisions
20. Final presentation to the Board

Appendix 2: Timelines for the activities on the PhD studies

	2013		2104		2015		2016		2017
	H1	H2	H1	H2	H1	H2	H1	H2	H1
Development of proposal	X								
Review of the proposal by supervisors	X								
Presentation of the proposal to the department	X								
Enrolment for the admission into PhD programme	X	X	X						
Presentation of the proposal to ethical committee			X						
Purchase of interview tools			X						
Conducting of interviews			X	X					
Analysis of the interview			X	X					
Development of questionnaires				X					
Conducting survey				X					
Analysis of questionnaire					X	X			
Presentation of the results to supervisor					X	X			
Writing of the final book						X			
Revisions of the final book						X			
Letter of intent to present							X		
Presentation of results to the BPGS								X	
Defence of the thesis								X	
Revision of from the defence								X	
Presentation for approval of revisions									X
Final presentation to the Board									X

Appendix 3: Budget for the course

Activity	Estimated cost in Ksh
Enrolment for PHD course	4,000
Review of the proposal by Supervisor	0
Presentation of the proposal to the department	0
Presentation of the proposal to ethical committee	5000
Purchase of 4 Quire Books	10,000
Purchase of Voice recorder	15,000
Analysis of the interview	50,000
Transcriber fee	25,000
Development of questionnaires	10,000
Assistant researcher	30,000
Analysis of questionnaire	50,000
Presentation of the results to supervisor	0
Binding of book	5000
Photocopying	5000
Fee for the course	45,000
Presentation of results to the department	0
Total	252,000

Appendix 4a: Consent form for Key informant

This informed consent form is for the faculty, residents, nurses, physiotherapist/occupational therapist, third and fifth-year medical students working in the surgical wards of Kenyatta National Hospital, who are the community involved in the surgical department. We are requesting these people to participate in this research project whose title is **"EXPLORING THE CONCEPTS OF PROFESSIONALISM IN SURGICAL TRAINING IN THE DEVEOPLING WORLD".**

Principal Investigator: Dr. Daniel Kinyuru Ojuka

Institution: School of Medicine, Department of Surgery- University of Nairobi

Supervisors: Professor Nimrod J Mwang'ombe, Professor Eunbae Yang, and Professor Joyce M Olenja.

This informed consent has three parts:

1. Information sheet (to share information about the research with you)
2. Certificate of Consent (for signature if you agree to take part)
3. Statement by the researcher

You will be given a copy of the full Informed Consent Form.

Part 1: Information sheet;

My name is Dr. Daniel Kinyuru Ojuka, I am a PhD student at the University of Nairobi, School of Medicine. I am carrying out a study entitled, "EXPLORING THE CONCEPTS OF PROFESSIONALISM IN SURGICAL TRAINING IN THE DEVEOPLING WORLD". The purpose of the study is to find out the perception of professionalism among the medical community in the medicals schools of our local context so that we can develop a relevant curriculum to help instil professionalism among the trainees.

The information you give is crucial since it will form the basis of the needs assessment towards developing the curriculum. That information will be treated as confidential, and your name will not be associated with anything you say in this group.

The discussions within the group will be taped so that the thoughts, opinions, and ideas from the group are captured. No names will be attached to the focus groups, and the tapes will be kept for 5 years under the custody of the principal investigator.

You may refuse to answer any question or withdraw from the study at any time.

This information is important and therefore will be kept private and confidential. All participants will be asked to respect each other. I am inviting you to participate in this study, and you are free to either agree immediately after receiving this information, or later after

thinking about it. You will be given the opportunity to ask questions before you decide, and you may talk to anyone you are comfortable with about the research before making a decision. After receiving this information concerning the study, please seek clarification from either myself or my assistant if there are words or details which you do not understand.

The information about you will only be in the informed consent form; no procedure of intervention will be performed on you. Your information will not be shared with anyone else unless authorized by the University of Nairobi /Kenyatta National Hospital - Ethics and Research Committee (UON/KNH-ERC).

Your involvement in this research will be through an interview, and you will not expose yourself to any risks if you consent to participate. All the information that you give us will be used for this research only.

This proposal has been reviewed and approved by the UON/KNH-ERC, which is a committee whose work is to make sure research participant like you is protected from harm. It was submitted to them through the Chairman, Department of Surgery, School of Medicine at the University of Nairobi, with the approval of the supervisors. The contact information of these people is given below if you wish to contact any of them for whatever reason;

1. Secretary, UON/KNH-ERC,
P.O. Box 20723- 00202,
KNH, Nairobi.
Tel: 020-726300-9
Email: KNHplan@Ken.Healthnet.org

2. Chairman,
Department of Surgery, School of Medicine - University of Nairobi,
P.O. Box 19676-00202,
KNH, Nairobi.
Tel: 020-2726300

3. The University of Nairobi research supervisors;

i) Prof Nimrod J Mwang'ombe,
Department of Surgery, School of Medicine - University of Nairobi,
Tel: 020-2726300

ii) Prof Joyce Olenja,
School of Public Health - University of Nairobi,

4. External supervisor:
Prof Eunbae Yang,
Yonsei University, School of Medicine, South Korea

5. Principal researcher:
Dr. Daniel Kinyuru Ojuka
Department of Surgery, School of Medicine, University of Nairobi
P.O. Box 19676-00202,
KNH, Nairobi.
Mobile phone: 0722322246

Part 2: Consent certificate;

I……...freely give consent by myself to take part in the study conducted by Dr. Daniel Kinyuru Ojuka, the nature of which has been explained to me by him/his research assistant. I have been informed and have understood that my participation is entirely voluntary, and I understand that I am free to withdraw my consent at any time if I so wish. The results of the study will have a direct impact on the training on professionalism.

……

Signature (left thumbprint)

Date……

Thumb print of participant if Unable to sign due to illiteracy

Part 3: Statement by researcher

I have accurately read out the information sheet to the participant, and to the best of my ability made sure that the participant understands that the following will be done:

- Refusal to participate or withdrawal from the study will not in any way compromise the care of treatment (for patient) teaching (for student) and relationship(faculty)
- All information given will be treated with confidentiality.
- The results of this study will be shared with relevant authorities as well as policy makers and also published in relevant medical journals.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Name of researcher/person taking consent _____

Signature of researcher/person taking consent _____

Date_____

Appendix 4b: Hati YaKuridhi

i) Sehemu Ya Kwanza **– Maelezo ya Daktari mtafiti**

Mimi ni Daktari Daniel Kinyuru Ojuka. Kiwango changu cha elimu ni shahada ya kwanza na ya pili ya MBChB na MMed mtawalia zote zilizo hitimika katika chuo kikuu cha Nairobi. Dhamira yangu ni kufanya utafiti katika jamii ya wahadhiriwa Shule ya Udaktari katika Chuo Kikuu cha Nairobi, kilichoko Hospitali kuu ya Kenyatta.

Mada ya utafiti huu ni 'Elimu ya udaktari wa upasuaji ikiangazia juu ya weledi waelimu katika mazingira ya nchi zinazoendelea. Lengo kuu la utafiti huu nikuchambulia sifa za ubingwa baina ya jamii ya wahadhiri katika shule za udaktari zilizoko nchi zinaziendelea.

Lengo kubwa la utafiti huu ni kueleza nguzo za sifa za ubingwa katika uwanja wa udaktari kwenye mazingira ya nchi zinazoendelea za ki-Africa kihistahilifu. Kwa hivyo, utafiti huu utasaidia kueleza sifa za ubingwa kitamaduni.

Utafiti huu umeidhinishwa na Idara ya Upasuaji wa Chuo Kikuu cha Nairobi na pia Halmashauri ya Uadiliwa Utafiti wa Hospitali Kuu ya Kenyatta.

Kwa hivyo na kusihi kushiriki kwenye utafiti huu kama mhojaji. Ukikubali kushiriki, utahojiwa faraghani au kadamnasi au kwanjia hizo zote mbili mtawalia.

Kushiriki kwa utafiti huu ni kwa hiari yako. Unaweza kutokubali kushiriki. Vile, unaweza kukubali na kisha baadaye kutamatisha ushirikiano na kujiondoa wakati wowote bila vikwazo vyovyote.

- Katibu wautafiti, Hospitali kuu ya Kenyatta na Chuo kikuu cha Nairobi. Sanduku la Posta 20723 KNH, Nairobi 00202. Nambari ya simu 726300-9.
- Walimu wasimamizi wa Chuo kikuu cha Nairobi:
    1. Profesa Nimrod J Mwang'ombe Sanduku la Posta 19676 KNH, Nairobi 00202. Nambari ya simu:0202726300
    2. Profesa Joyce Olenja Sanduku la Posta 19676 KNH, Nairobi 00202.
    3. Mtafiti: Daktari Daniel Kinyuru Ojuka, Idara ya Upasuaji ya– Chuo kikuu cha Nairobi, Sanduku la Posta 2969 KNH Nairobi 00202. Nambari ya simu ya mkononi 0722322246

(ii) Sehemu ya pili – Idhini ya Mhojiwa.

Mimi(Jina)……. Mhojiwa/Mgonjwa) ……. kwa hiari yangu nimekubali kushiriki katika utafiti huu unaofanywa na Daktari Daniel Kinyuru Ojuka kutokana na hali ambazo nimeelezwa na sio kwa malipo ama shurutisho lolote.

Nimeelewa kwamba ninaweza kujiondoa wakati wowote nitakapo na hatua hii haitahatarisha matibabu /masomo ninayoyapata /anayoyapata mgonjwa wangu. Matokeo ya utafiti yaweza kuwa ya manufaa kwa elimu ya udaktari kwa jumla na hata madaktari wenyewe, kwa kuendeleza elimu.

…….

Sahihi/ama alama ya kidole cha gumba katika sanduku →

Tarehe…….....

Jina la shahidi……

Sahihi…….

Tarehe…….

Kidole cha gumba kwa Yule asiyeelewa kuandika

(iii) Sehemu ya tatu – Dhibitisho la mtafiti

Hii nikuidhinisha ya kwamba nimemueleza mhojaji kuhusu utafiti huu na pia nimempa nafasi ya kuuliza maswali. Nimemueleza yafuatayo;

- Kwamba kushiriki ni kwa hiari yake mwenyewe bila malipo.
- Kushuriki hakuta sababisha madhara ama kuhatarisha maisha yake kamwe.
- Anaweza kujiondoa kutoka kwa utafiti huu wakati wowote bila kuhatarisha matibabu.ama masomo ama kazi anayoyapata/anayoyafanya katika hospital kuu ya Kenyatta.
- Habari ambazo atapeana hazitatangazwa hadharani bila ruhusa kutoka kwake (mshiriki) na pia kutoka kwa mdhamini mkuu wa utafiti wa hospital kuu ya Kenyatta na chuo kikuu cha Nairobi.

Jina la mtafiti ama msimamizi wake……

Sahihi…….

Tarehe…….

Appendix 5: Guiding Questions for interviews

1. Cadre …….
2. Focus group……...Individual…….
3. Guiding questions
    i) In your view, what are the major concepts of professionalism within a developing country context as seen in the University of Nairobi's surgical community?
    ii) In your view, how has professionalism been taught at the medical school?
    iii) In your opinion, what are the main challenges to the practice and teaching of professionalism in our context?
    iv) In your opinion, how can we overcome these problems?
    v) How can the challenges to the practice of professionalism in a developing world be overcome so as to effectively teach professionalism?
4. For patient:
    i) How would you characterize a professional doctor? What would you like the young doctors to be taught in order to be good doctors?

Appendix 6: Initial Survey tool before the piloting study

Participant Informed Consent

Title: Exploring the concepts of professionalism in surgical training in the developing world

Principal investigators: Dr Daniel Kinyuru Ojuka

Affiliation: University of Nairobi, Department of Surgery

Introduction and Purpose.

Medical educators think of professionalism as crucial competency for physicians in all specialties. Therefore, undergraduate and postgraduate programmes all over the world are investing greatly in teaching and assessing medical professionalism in their curricula. As professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour. Attributes of a professional physicians are not universal, and cultural differences exist. Moreover, professionalism is viewed as a social contract between doctors and society. Therefore, it cannot be viewed in isolation from society as the culture's influence on physicians and societies may lead to certain differences. These differences are being increasingly recognized by medical educators all over the world, and efforts are being invested in the development of competency frameworks that address professionalism in a manner that is suitable for the local culture.

We would like to find out the concepts of professionalism as embedded in our culture so as to be relevant in the development of the curriculum to teach and assess this core competency that is crucial in medical education.

Procedure: You will need approximately 10 minutes to complete this survey. The survey entails reading and understanding the questions in the items then checking in the appropriate box of the listed choices once for every item.

Risks: There are no anticipated risks of physical, mental, emotional or financial harm to you.

Benefits: Participating in this research study may not benefit you directly, but the researchers may learn new information that may impact or further improve the curriculum on professionalism in Africa, from which you should indirectly benefit.

Confidentiality: We will keep your name and contact information strictly private and secure to the utmost extent possible as required by the Ethical Review Committee of Kenyatta National Hospital and University of Nairobi. The survey will be immediately digitized, de-

identified and stored on a secure password-protected database.

Compensation and costs: There is no financial or other compensation for your time and effort spent participating in this study. This study is not grant-funded; hence all study-related costs will be directly absorbed by the study investigators.

Voluntary participation and withdrawal: Your participation is voluntary and you have the right to refuse to be in this study. You can stop at any time after giving your consent. Completing the questionnaire signifies your consent to the study. Any data you have provided will be deleted upon request. This decision will not affect you personally or professionally.

Contact persons: If you have any questions, concerns, or complaints about this study, you can contact the study Principal Investigators directly:

Dr Daniel Kinyuru Ojuka,

+254-722322246

Email: dkinyuru@yahoo.com

To speak to someone who is not a member of the study to discuss problems, ask questions or voice concerns, call:

Secretary, UON/KNH-ERC,

P.O. Box 20723- 00202, KNH, Nairobi.

Tel: +254-20-726300-9.

Email: KNHplan@Ken.Healthnet.org

Respondent Name (Optional) _____ Signature_____ Date_____

QUESTIONNAIRE ON EXPLORING THE CONCEPTS OF PROFESSIONALISM IN SURGICAL TRAINING IN THE DEVELOPING WORLD.

1. Gender of respondent
    a) Female
    b) Male
2. Your age bracket
    a) 20-30
    b) 31-40
    c) 41-50
    d) 51-60
    e) 61-70
    f) 71-80
3. What is your role in the training of students in surgery?
    a) Consultant
    b) Registrar
    c) Medical student
    d) Nursing officer
    e) Physiotherapist /occupational therapist
    f) Nutrionists
    g) Patient
4. Number of years as a trainer of surgery to students in the University of Nairobi.
    1. >20
    2. 10-20
    3. 5-10
    4. 1-5
    5. Student / Patient

5. When asked what they thought about professionalism, a number of people mentioned the issues below as depicting professionalism. Would you agree?

Item	Strongly agree	Agree	Disagree	Strongly disagree
Empathy				
Respect of patient and colleagues				
Keeping the societal and community values				
Having good knowledge and skills in that field				
Justice				
Being loyal to patient; do no harm				
Upholding the right of the patient and of the doctor				
Treating the patients, the same without discrimination/ equality				
Good interaction between doctor and patient and doctor/health care workers				
Keeping the standard and quality of care				
Commitment to your work as a doctor				
Accountable to patient and other doctors				
Dedication to patient /putting patient first above one's needs				
Integrity and responsibility				
Being Honest to client /owning to one's mistakes				
Humility				
Etiquette				
Keeping time as a doctor				
Availability for patients and students				

6. To what extent do the following items reflect your definition of professionalism?

Item	Large extent	Some extent	Unrelated to professionalism
Empathy			
Respect of patient and colleagues			
Keeping the societal and community values			
Having good knowledge and skills in that field			
Justice			
Being loyal to patient; do no harm			
Upholding the right of the patient and of the doctor			
Treating the patients, the same without discrimination/ equality			
Good interaction between doctor and patient and doctor –doctor/other health care workers			
Keeping the standard and quality of care			
Commitment to your work as a doctor			
Accountable to patient and other doctors			
Dedication to patient /putting patient first above one's needs			
Integrity and responsibility			
Being Honest to client /owning to one's mistakes			
Humility			
Etiquette			
Keeping time as a doctor			
Availability for patients and students			

7. To what extent do the following items reflect the method that has been in use to instill professionalism in the University of Nairobi?

	Large extent	Some extent	Does not
Apprenticeship (mentorship, observing, modelling)			
Through media (internet, advertisement, materials read)			
Through Regulations (rules, discipline and feedback systems)			
Community of peers, parents, and religion)			
Through formal training			

8. To what extent are the following items the most challenging issues in the practice or instil professionalism in the University of Nairobi**?**

	Large extent	Some extent	Not a challenge
Personality of lecturer/doctors			
Motivation is money rather than outcome of either patient or student			
Lack of commitment to one's work			
Doctors do not abide by any regulation, either hospital or university			
Inadequate equipment, office space, payment, workers and lecturer rooms			
Disillusionment of faculty and students			
Culture of respect for the rich regardless of how they acquired their wealth			
Culture of impunity in the society, no discipline even for those who have erred			
Personal interest overruns patients interest			
No institutional culture to guide professionalism			
Lack of formal teaching and assessment of professionalism			
No recognition of work done by doctors			
Poor relation with other health care workers			

9. To what extent do the items below describe how the challenges of practice and instilling of professionalism can be overcome in University of Nairobi?

Item	Large extent	Some extent	Does not
Proper regulation and enforcement of discipline and standards including appraisals			
Proper and clear leadership for cultural change			
Choose student /lecturers based on aptitude, gifting and attitude			
Medicine should be a calling			
Have a social program for both student and faculty			
Have a formal and assessed curriculum on professionalism			
Mentorship program that work			
Have workshops /seminars on professionalism for faculty			
Exchange program with other institutions			
Pay the workers well			
Work shifts			
Divide facility into smaller manageable sections			
Have a good teaching facility			
Increase the number of lecturers			
Have a good teaching environment /reward system			
Have an alternative teaching site			

10. How would you rate the usefulness of the following items in improving instilling of professionalism in University of Nairobi?

Item	Extremely useful	Very useful	Useful	Slightly useful	Not useful
Lecturers should be retrained					
Lecturers to be recruited based on attitude and ability to deliver					
Choose student who view medicine as a call					
Have a clear formal and assessed curriculum on professionalism					

Appendix 7. Survey tool after the pilot study

Title: Exploring the concepts of professionalism in surgical training in the developing world
Principal investigators: Dr. Daniel Kinyuru Ojuka
Affiliation: The University of Nairobi, Department of Surgery

Introduction and Purpose.

Medical educators think of professionalism as a crucial competency for physicians in all specialties. Therefore, undergraduate and postgraduate programmes all over the world are investing greatly in teaching and assessing medical professionalism in their curricula. As professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

Attributes of a professional physician are not universal and cultural differences exist. Moreover, professionalism is viewed as a social contract between doctors and society. Therefore, it cannot be seen in isolation from society as the culture's influence on physicians and societies may lead to certain differences. Medical educators are increasingly recognizing these differences all over the world, and efforts are being invested in the development of competency frameworks that address professionalism in a manner that is suitable for the local culture.

We would like to find out the concepts of professionalism as embedded in our culture so as to be relevant in the development of the curriculum to teach and assess this core competency that is crucial in medical education.

Procedure: You will need approximately 10 minutes to complete this survey. The survey entails reading and understanding the questions in the items then checking in the appropriate box of the listed choices once for every item.

Risks: There are no anticipated risks of physical, mental, emotional or financial harm to you.

Benefits: Participating in this research study may not benefit you directly, but the researchers may learn new information that may impact or further improve the curriculum on professionalism in Africa, from which you should indirectly benefit.

Confidentiality: We will keep your name and contact information strictly private and secure to the utmost extent possible as required by the Ethical Review Committee of Kenyatta National Hospital and the University of Nairobi. The survey will be immediately digitized, de-identified and stored on a secure password protected the database.

Compensation and costs: There is no financial or other compensation for your time and effort

spent participating in this study. This study is not grant-funded; hence, all study-related costs will be directly absorbed by the study investigators. **Voluntary participation and withdrawal**: Your participation is voluntary, and you have the right to refuse to be in this study. You can stop at any time after giving your consent. Feeling the questionnaire signify your consent to the study. Any data you have provided will be deleted upon request. This decision will not affect you personally or professionally. **Contact persons**: If you have any questions, concerns, or complaints about this study, you can communicate with the study Principal Investigators directly:

Dr. Daniel Kinyuru Ojuka,
+254-722322246,
Email: danielojuka@gmail.com

To speak to someone who is not a member of the study to discuss problems, ask questions or voice concerns, call:

Secretary, UON/KNH-ERC,
P.O. Box 20723- 00202, KNH, Nairobi.
Tel: +254-20-726300-9.
Email: KNHplan@Ken.Healthnet.org

Respondent Name (Optional) _____ Signature_____

Date_____

QUESTIONNAIRE ON EXPLORING THE CONCEPTS OF PROFESSIONALISM IN SURGICAL TRAINING IN THE DEVELOPING WORLD

1. **Gender of respondent**
    a. Female
    b. Male
2. **Your age bracket**
    a. 20-30
    b. 31-40
    c. 41-50
    d. 51-60
    e. 61-70
    f. 71-80
3. **What is your role in the training of students in surgery?**
    h) Consultant
    i) Registrar
    j) Medical student
    k) Nursing Officer
    l) Physiotherapist /Occupational therapist
    m) Nutritionist
    n) Patient
4. **Number of years as a trainer of surgery students at the University of Nairobi**.
    6. >20
    7. 10-20
    8. 5-10
    9. 1-5
    10. Student
    11. Patient

5. The following behaviour best describes professionalism in so far as surgical practice and teaching is concerned.

Item	Strongly agree	Agree	Disagree	Strongly disagree
Empathy				
Respect of patient and colleagues				
Keeping the societal and community values				
Having good knowledge and skills in that field				
Justice				
Being loyal to patient; do no harm				
Upholding the right of the patient and the doctor				
Treating the patients, the same without discrimination/ equality				
Good interaction between doctor and patient and doctor/health care workers				
Keeping the standard and quality of care				
Commitment to your work as a doctor				
Accountable to patient and other doctors				
Dedication to patient /putting patient first above one's needs				
Integrity and responsibility				
Being Honest to client /owning to one's mistakes				
Humility				
Etiquette				
Keeping time as a doctor				
Availability for patients and students				

6. **The following items reflect the method(s) that has been in use for teaching professionalism among the surgeons and trainees at the University of Nairobi.**

	Strongly agree	Agree	Disagree	Strongly disagree
Apprenticeship (mentorship, observing, modelling)				
Through media (internet, advertisement, materials read)				
Through Regulations (rules, discipline and feedback systems)				
Community of peers, parents, and religion)				
Through formal training				

7. **The following items describe the most challenging issues in the practice or teaching of professionalism among the surgeons and trainees at the University of Nairobi.**

	Strongly agree	Agree	Disagree	Strongly disagree
Personality of lecturer/doctors				
Motivation is money rather than outcome of either patient or student				
Lack of commitment to one's work				
Doctors do not abide by any regulation, either hospital or university				
Inadequate equipment, office space, payment, workers and lecturer rooms				
Disillusionment of faculty and students				
Culture of respect for the rich regardless of how they acquired their wealth				
Culture of impunity in the society, no discipline even for those who have erred				
Personal interest overruns patients interest				
No institutional culture to guide professionalism				
Lack of formal teaching and assessment of professionalism				
No recognition of work done by doctors				
Poor relation with other health care workers				

8. **The items below describe how the challenges of practice and teaching of professionalism can be overcome in the University of Nairobi?**

Item	Strongly agree	Agree	Disagree	Strongly disagree
Proper regulation and enforcement of discipline and standards including appraisals				
Proper and clear leadership for cultural change				
Choose student /lecturers based on aptitude, gifting, and attitude				
Medicine should be a calling				
Have a social program for both student and faculty				
Have a formal and assessed curriculum on professionalism				
Mentorship program that work				
Have workshops /seminars on professionalism for faculty				
Exchange program with other institutions				
Pay the workers well				
Work shifts				
Divide facility into smaller manageable sections				
Have a good teaching facility				
Increase the number of lecturers				
Have a good teaching environment /reward system				
Have an alternative teaching site				

9. **How would you rate the usefulness of the following items in improving the teaching of professionalism in theUniversity of Nairobi?**

Item	Extremely useful	Very useful	Useful	Slightly useful	Not useful
Lecturers should be retrained					
Lecturers to be recruited based on attitude and ability to deliver					
Choose student who view medicine as a call					
Have a clear formal and assessed curriculum on professionalism					

Appendix 8. The original Hippocratic Oath

The Hippocratic Oath

I swear by Apollo Physician and Asclepius and Hygieia and Panaceia and all the gods and goddesses, making them my witnesses, that I will fulfil according to my ability and judgment this oath and this covenant:

To hold him who has taught me this art as equal to my parents and to live my life in partnership with him, and if he is in need of money to give him a share of mine, and to regard his offspring as equal to my brothers in male lineage and to teach them this art — if they desire to learn it — without fee and covenant; to give a share of precepts and oral instruction and all the other learning to my sons and to the sons of him who has instructed me and to pupils who have signed the covenant and have taken an oath according to the medical law, but to no one else.

I will apply dietetic measures for the benefit of the sick according to my ability and judgment; I will keep them from harm and injustice. I will neither give a deadly drug to anybody if asked for it nor will I make a suggestion to this effect. Similarly, I will not give to a woman an abortive remedy. In purity and holiness, I will guard my life and my art.

I will not use the knife, not even on sufferers from stone, but will withdraw in favour of such men as are engaged in this work.

Whatever houses I may visit, I will come for the benefit of the sick, remaining free of all intentional injustice, of all mischief and in particular of sexual relations with both female and male persons, be they free or slaves.

What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men, which on no account one must spread abroad, I will keep to myself holding such things shameful to be spoken about.

If I fulfil this oath and do not violate it, may it be granted to me to enjoy life and art, being honoured with fame among all men for all time to come; if I transgress it and swear falsely, may the opposite of all this be my lot.

*Translated from the Greek by Edelstein. (*60)

Appendix 9. Hippocratic Oath as Modified by University of Nairobi

"I…….
Solemnly pledge myself to consecrate my life to the service of humanity.
I will give to my teachers the respect and gratitude which is their due;
I will practice my profession with conscience and dignity;
The health of my patient will be my first consideration;
I will respect the secrets which are confided in me; Even after the patient has died;
I will maintain by all means in my power, the honour and the noble traditions of the medical professions;
My colleagues will be my brothers and sisters
I will not permit considerations of religion, nationality, race, party politics or social standings to intervene between my duty and the patient;
I will maintain the utmost respect for human life from its beginning even under threat, and I will not use my medical knowledge contrary to the laws of humanity
I make these promises solemnly, freely and upon my honour."

…… ……..
Signature Date
Witnessed by:
……. …… …….
Name Signature Date
Witnessed by:
…….. ……. …….
Name Signature Date

Appendix 10: List of Publications

1. 10.1. Published
2. Challenges in practicing and inculcating professionalism in the University of Nairobi: A mixed methods study. Ojuka D, Olenja J, Eunbae Y and Nimrod M. *MedEdPublish* 2015, 6: 4 http://dx.doi.org/10.15694/mep.2015.006.0004.
3. Ojuka DK, Olenja JM, Mwango'mbe NJ, Yang EB, Macleod JB. Perception of medical professionalism among the surgical community in the University of Nairobi: a mixed method study. BMC Med Educ. 2016 Apr 1;16(1):101. http://dx.doi.org/ 10.1186/s12909-016-0622-4
4. 10.2. Submitted under revision
5. Learning of medical professionalism in the department of Surgery University of Nairobi, Kenyan: the perspective of students, teachers and ancillary staff. #661 at African Journal of Professional Health Education. Revised once.
6. 10.3 Under revision for submission
7. Nurturing of medical professionalism in the University of Nairobi School of Medicine: Perspectives from the surgical community.