A VALIDATED SURVEY ON PROFESSIONALISM AMONG ANESTHETIST IN PRIVATE & GOVERNMENT HOSPITALS IN MALAYSIA

BY

LEE SOH NAM

A dissertation submitted in fulfilment of the requirement for
Master of Medicine in Anaesthesiology

Kulliyyah of Medicine
International Islamic University Malaysia

NOVEMBER 2019

ABSTRACT

Introduction: Professionalism is the basis of medicine's contract with society as defined by the Physician's charter. Although there have been significant efforts in teaching said subject among the medical community, efforts to objectively assess professionalism among anaesthetists remains elusive. Several studies done have indicated communication, ethics & compassion are part of what defines a professional anaesthetist. We have hence created a questionnaire that probes on how professionalism can be assessed among anaesthetists in Malaysia. **Methods:** This is a randomised multicenter cross-sectional study among doctors in anaesthesia in private & government hospitals to validate a self-created questionnaire of 37 items which had its face validity done prior with a panel of 4 experts. Inclusion criteria were doctors in anaesthesia for more than one year. The study was conducted in International Islamic University of Malaysia Medical Center, Hospital Raja Permaisuri Bainun Ipoh, Hospital Kuala Lumpur **Results:** There were 227 respondents with a total of 158 (69.6%) of respondents from government hospitals and 30.4% (69 respondents) from university hospital. The factor analysis gave a total of 3 main components, knowledge, attitude and practice with 3 of the 37 items not achieving good loading factors. The internal consistency (Cronbach alpha) for each component was good except for knowledge (Cronbach alpha of 0.282) **Conclusions:** The survey for professionalism among anaesthetist in private and government hospitals is valid with good internal consistency.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Medicine (Anaesthesiology).

…….
Muhammad Rasydan Bin Abdul Ghani
Supervisor

…….
Ramli Bin Musa
Co-Supervisor

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Medicine (Anaesthesiology).

…….
Examiner

This dissertation was submitted to the Department of Anaesthesiology and Intensive Care and is accepted as a fulfilment of the requirement for the degree of Master of Medicine (Anaesthesiology).

…….
Rozilah @ Abdul Hadi bin Mohamed
Head, Department of Anaesthesiology
and Intensive Care

This dissertation was submitted to the Kulliyyah of Medicine and is accepted as a fulfilment of the requirement for the degree of Master of Medicine (Anaesthesiology).

……...……..
Azmi bin Md Nor
Dean, Kulliyyah of Medicine

DECLARATION

I as a result of this, declare that this dissertation is the result of my investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Lee Soh Nam

Signature ..... Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

A VALIDATED SURVEY ON PROFESSIONALISM AMONG ANESTHETIST IN PRIVATE & GOVERNMENT HOSPITALS IN MALAYSIA

I declare that the copyright holders of this dissertation are jointly owned by the student and IIUM.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialization policy.

Affirmed by Lee Soh Nam

……..…….. ……..

Signature Date

ACKNOWLEDGEMENTS

Firstly, I would like to express thanks to my supervisor Assistant Professor Dr Muhammad Rasydan Bin Abdul Ghani. I would also like to thank my co-supervisors Associate Professor Dr Rozilah @ Abdul Hadi bin Mohamed and Professor Dr Ramli bin Musa for all the guidance showed to me in the production of my thesis.

I want to express my profound gratitude to the following experts who have given me their time & expertise in the validation of my questionnaire. Adjunct Professor Dr Yasaharu Tokuda from Tsukuba University, Ibaraki, Japan, Professor Dr José Ricardo Navarro Vargas; Dean of Medicine of National University of Columbia, Professor Dato' Dr. Ravindran Jegasothy, Dean of Medicine MAHSA University & Professor Dr Azmi bin Md Nor, Dean of Medicine of Universiti Islam Antarabangsa Malaysia.

I wish to express my appreciation and thanks to my colleagues Dr Keren Lim Seok Luan, Dr Dinakaren A/L Balashanmugam & Dr Mohd Ariffudin Bin Abdul Hamid who have shared their knowledge and support in writing this thesis. To the dissertation committee members, thank you for being with me.

A special thanks to Professor Dato Dr Ariff bin Osman for his guidance and help, Associate Professor Dr Azrina Binti Md Ralib for her support & encouragement, Assistant Professor Dr Nur Fariza Binti Ramly for sharing her expertise regarding the usage of Google form and Associate Professor Razman Bin Mohd. Rus for going through my statistical analysis. You have my heartfelt gratitude.

I would also like to say a heartfelt prayer, to the powers that be who have enabled meto complete this thesis successfully.

Last but not the least, I would like to dedicate this dissertation to my parents & family, who have given me love & support throughout this period.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AAMC	Association of American Medical College
ABIM	American Board of Internal Medicine
ACP-ASIM	American Society of Internal Medicine
ACGME	Accreditation Council for Graduate Medical Education
ANOVA	Analysis of Variance
BBC	British Broadcast Channel
BCE	Before the Common Era
CME	Continuous Medical Education
EFIM	European Federation of Internal Medicine
GCS	Glasgow Coma Scale
KMO	Kaiser-Meyer-Olkin
NAS	Negative Attitude Scale
NHS	National Health Service
PACU	Post Anesthesia Care Unit
UKM	Universiti Kebangsaan Malaysia
UniSZA	Universiti Sultan Zainal Abidin

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Medicine in the 19th century did not focus on healing, as there were no cure for many diseases. Physicians at that time were more focused on relieving the suffering of patients as well as empathy with their condition; thus, medical professionalism was born.(Stevens, 2002) Since the discovery of antibiotics in the 20th century, patients were getting cured, and the direction and focus of doctors changed to one who could be the most well informed on the most recent updates in medical techniques and increased fascination with medical technology. This has put empathy and altruism on the sidelines. (Sullivan, 2000; Curry, 2009) Doctors became more autocratic, and we have put ourselves on pedestals. However, patients did not want to be treated by unfeeling automatons and demanded a doctor to be balanced in knowledge as well as empathy. They wanted doctors to behave more professionally.(Schmidt, Sanders, Larkin & Knopp, 1998; Ahadi, Mianehsaz, Raissi, Moraveji & Sharifi, 2015)

So, what exactly is professionalism? Well, that would be a difficult question to answer. While the definition by the Physician's charter in which professionalism is the basis of medicine's contract with society is the most widely accepted definition (ABIM, 2005), there has been difficulty in pinpointing exactly what constitutes the exact definition for professionalism. Still others such as the Canadian Medical Association define professionalism as skills, attitudes and behaviors which we have come to expect from individuals during the practice of their profession. (Yang, 2017). Some like the Working Party of the Royal College of Physicians, London further defines ''Medical

professionalism signifies a set of values, behaviours, and relationships that underpins the trust the public has in doctors.'' (Cole, 2016). While there is no true consensus regarding what defines professionalism, most parties believe and accept professionalism as attributes and behaviour as expected of a physician. (Kasule, 2013).

What constitutes professional behaviour? Perhaps it is easier to answer the question of what constitutes unprofessional behaviour. The phrase "I know it when I see it" (Yang 2017) is often associated with professionalism as fundamentally; professionalism is composed of a certain set of values that are present in an individual's mind of how a doctor should behave. Such vague connotations have long confused those who try to define professionalism objectively and is such, a starting point of many studies in professionalism. This is not surprising as the term professionalism covers a broad spectrum of concepts. The Canadian Medical Association in 2001 includes competence, ethical behaviour, integrity, honesty, altruism, service to others, adherence to professional codes, justice, respect for others, self-regulation as domains seen by doctors who are proficient in professionalism. In 2005, the Royal College of Physicians in the UK in their Working Group Report included integrity, compassion, altruism, and excellence as their principals for professionalism. The American Board of Internal Medicine included altruism, accountability, excellence, duty, honour and integrity, and respect for others as elements needed for a doctor to be declared proficient in professionalism.(ABIM, 2005) The Australian Medical Association gave respect, trust, compassion, altruism, integrity, advocacy and justice, accountability, protection of confidentiality, leadership, collaboration, advancing knowledge and innovation, teaching, mentoring and collegiality, and practicing and promoting responsible stewardship of health care resources in what constitutes professionalism.(Yang, 2017) While all these bodies have different categorisation and criteria for what constitutes

professionalism, all follows the fundamental principals given by the physician charter in which there is patient autonomy, patient welfare and social justice.(Shah & Wu, 2009) Based on all these criteria, it is no wonder that to determine the domains of what constitutes professionalism.

Professionalism also has cultural connotations, and what is expected in a certain culture may be different for another culture. In Western cultures, professionalism can be traced back to Hippocrates in 460 BCE. In the 6th century, Kasyapa Samhita in India passed down principles to teach new physicians in professionalism. From 4th century BCE to 1st century CE in China, Huangdi Neijing defines the ideal physician envisioned in the Inner Canon of China combines 'supreme virtue' (Zhi de) with 'supreme skill' (Zhi Qiao). While all these cultures have different connotation as to what constitutes professionalism the characteristics that can be categorised as virtue remains more or less the same, however, in regards to behaviour expectation, there might be significant differences in between cultures that might be substantial.(Shapiro, Nixon, Wear & Doukas, 2015; Elzubier, 2002) As such, assessment of professionalism in Malaysia may pose a problem due to the different cultures present in our society.

In today's ever-changing landscape of modern medicine, patients expect in regards to professionalism. Nowadays, medicine has evolved into a more patient-centred affair, in which most patients expect a certain amount (if not total) of autonomy in the treatment that they receive. So much so, that people have termed professionalism would be the heart & soul of medicine to the brain that is science and technology. As such, patients are treated with professionalism and altruism in mind. But what about our treatment to other doctors? In this respect, the way doctors interact with each other left much to be desired especially in the way of professionalism. (Benatar, 1997) Miscommunication or lack of communication, being harassed by fellow physicians,

burn-out and lack of respect towards cultural differences and individual needs are just some of the ways that physician ill-treat each other in a working environment devoid of professionalism (Tokuda et al 2009, Ganasegaran & Al-Dubai 2014). No where is this more evident as in the field of anesthesia and intensive care due to the interactions with multiple disciplines most at the same time (e.g. on the operating table) in which if unprofessional behaviour dominates, the relationship between colleagues will be strained to say the least which actually causes more risk of malpractice due to unprofessionalism behaviour. Moreover, the medical industry is a billion-ringgit industry and the economic growth seen in the late 20th century has encouraged accelerated scientific advancement in medicine. Unfortunately, such advancement is done at the expense of philanthropic values and has incurred increasing negative feelings among physicians. So much so that the relationship can deteriorate to level of the buyer (patient) and the seller (doctor), in which no altruism given to patient after the contact is over. (Duff, 2004) This can place the physician as a mere employee in a vast medical corporation and thus, has limited say in the patients' management, working like protocol orientated robots; leading to dissatisfaction and increase in unprofessionalism (Reed & Evans 1987). This increase in unprofessionalism has, therefore, creates an antagonistic environment that may pit the physicians against the patient in a battle in which any victors are deemed as losers in the bigger picture and thus, will further erode the tentative bond between doctors and those that they treat.(Binder, Friedli & Fuentes-afflick, 2014)

Such tension will have its ill effects. It manifests mostly as malpractice suits, inappropriate or unprofessional behaviours that jeopardise a patient's safety which may not result in any disciplinary actions; but loss of life and limb on the patients' part. Indeed, literature has shown that doctors who behaved professionally were less likely

to be sued compared to those who were less professional (Studdert, Bismark, Mello, Songh & Spittal 2016; Brissette et al, 2017). There is an association between unprofessional behaviour and increased disciplinary action by medical board in later years in doctors. (Papadakis, Hodgson,Teherani, & Arianne 2004). Hence, it is obvious that professionalism has to be taught as part of the skills required in a doctors' repertoire.

The start of the 21st century brings with it advancement in medical technology as well as in the communication; connecting the whole world through wireless network with just the click of a button. This has changed the whole landscape of medical communication as well as medical education. (Hamm et al, 2013) While the benefits of such ease of communication is evident, recently, there has been concerns regarding possible abuse on such social media regarding medical professionalism and professional ethics (Fenwick 2014). One incident that comes to mind was the breach of data from the NHS of UK, which compromised the information of 150,000 patients (BBC 2nd Jul 2018). Principals for an e-professionalism or guidelines on how professionalism should be conducted online should be formed and practised.

While researching the history of anaesthesia, multiple exemplars in professionalism can be found. One such paragon was John Snow who was one of the first physicians to administer ether and chloroform according to calculated dosages for surgical anaesthesia. He was called in 1853 to administer chloroform on Queen Victoria during the birth of Prince Leopold and thus, became the pioneer of obstetric anaesthesia. The church did Snow's advocacy of labor analgesia admist much antipathy and his fellow physicians who deemed administering labour analgesia was "contrary to God's will". John Snow demonstrated further professionalism by changing his practice in anaesthesia by suggesting that the doctor who administered the anaesthetic should be a different doctor than the surgeon who performs the surgery to ensure the patient's

safety.(Yang, 2017) He was also committed to developing his comprehension in anaesthesia and directed most of his practice towards it. Indeed, this seems to indicate that professionalism is deeply rooted in anaesthesia.

Given the increasing importance of professionalism in all medical disciplines especially in anaesthesia, it has become important to incorporate teachings of professionalism in the postgraduate training in anaesthesia. Traditionally, role modelling has been the method of choice in teaching professionalism, but it has to be more definitive than implied. That said, for a subject as elusive and theologic as professionalism, normal lectures or bedside teachings may be inadequate to communicate the gravitas of the subject. For this to convey the intricacies of professionalism, a form of curricula should be incorporated into the postgraduate training syllabus such as scenario-based teaching (Srinivasan et al, 2004; Dorotta, Staszak, Takla & Tetzlaff 2006). However, such lectures & workshops might not translate well to daily clinical practice, and hence daily assessment by partial reviewer might be the most effective (Curry, 2009).

In this context, there seems to be need for assessment of professionalism, especially in the field of anaesthesia. Unfortunately assessing a subject as multifaceted also has its challenges and difficulties. It also has to be tailored for the specific cultural subtext in which it is supposed to cater. There is also the fact that those being examined might find the assessors to be unfair, but few have chosen case-based scenarios to assess the candidates. (Srinivasan et al 2004; Dorotta et al 2006)

Currently, there are next to none validated tools to assess professionalism in Malaysia. While Salam (2014) & (Ganesegaran & Al-Dubai, 2014) have chosen to assess undergraduates, none have done it on the anaesthesia faculty. As there is increasing importance in our daily clinical practice in anaesthesia, there is certainly a

niche for any study that would focus on improving understanding of professionalism in anaesthesia or ways in objectively assessing it.

1.2 STATEMENT OF THE PROBLEM

Professionalism is an important aspect of any practising doctor more so an anaesthetist but is considerably lacking in methods to objectively assess the degree of professionalism in these individuals as they are mostly not taught in the medical curricula. This study will also test the knowledge regarding professionalism among doctors practising anaesthesia, gauge the attitude and practices among said doctors in the field of anaesthesia among its completion.

1.3 PURPOSE OF THE STUDY

The main purpose of this study is to devise & validate a tool that enables the researcher to objectively assess the level of professionalism among doctors in anaesthesia in private & government hospitals in Malaysia.

1.4 RESEARCH OBJECTIVES

The following are this study objectives following its completion:

i. To devise & validate a tool to objectively assess professionalism among doctors practising anaesthesia
ii. To ascertain the level of knowledge in professionalism among doctors in anaesthesia
iii. To evaluate the attitude towards professionalism among doctors in the field of anaesthesia
iv. To determine the practice of professionalism of said doctors

v. To establish the level of professionalism among doctors in anaesthesia

1.5 RESEARCH QUESTIONS

This study was conducted to search for answers to the following questions:

i. How to assess the level of knowledge in anaesthetists regarding professionalism?

ii. What are objective assessments of attitudes towards professionalism in anaesthetists?

iii. Do anaesthetists practice professionalism and how to assess?

iv. How to devise and validate a tool use to assess professionalism among anaesthetists?

1.6 THEORETICAL FRAMEWORK

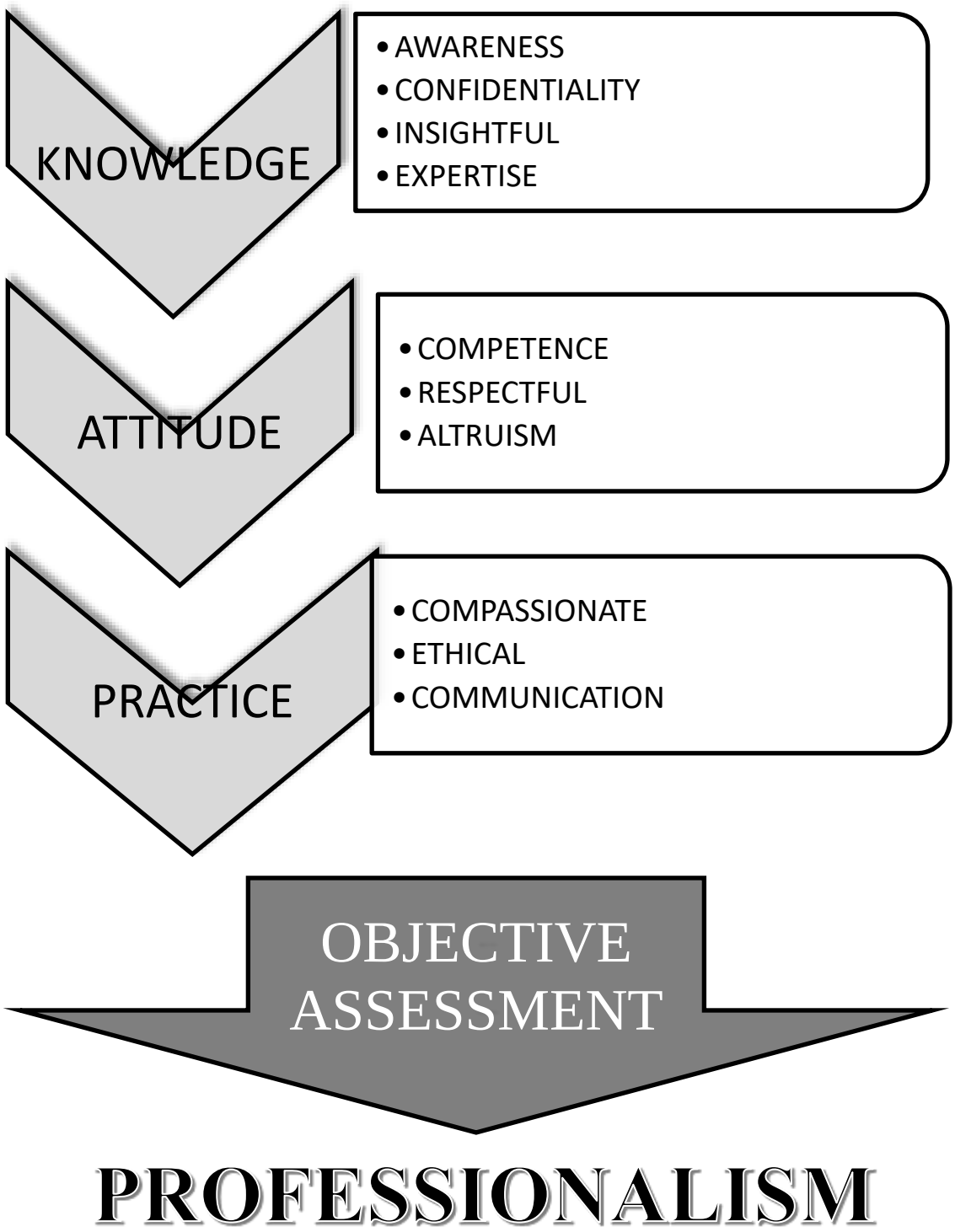

Figure 1.1 Theoretical Framework

1.7 RESEARCH HYPOTHESES

The hypotheses are that a questionnaire can be used to assess said professionalism objectively. It is also hypothesised that doctors practising anaesthesia have profound knowledge in professionalism, have good attitudes in professionalism and practice professionalism daily.

1.8 SIGNIFICANCE OF THE STUDY

The current study may provide with a validated tool to assess professionalism among doctors practising anaesthesia. This will help shape how professionalism will be taught in the undergraduate or postgraduate curricula and thus promote a well-rounded anaesthetist.

1.9 LIMITATIONS OF THE STUDY

There are few limitations to this study, which are:

i. Study was of cross-sectional designs, and it may prove to have different results if taken at a different time frame
ii. Participants sampled from 3 centres are unequal in number.
iii. Selection bias may occur as the majority of respondents are from the medical officer group
iv. Response bias may occur as the questionnaire is in the form of a Likert scale
v. Sample size of 222 though is acceptable for this study, a higher number might provide more credible results.

1.10 DEFINITIONS OF TERMS

Validity

Validity is defined as the extent to which a concept is accurately measured in a quantitative study (Heale & Twycross 2015)

Face validity

A form of content validity in which experts are asked regarding their opinion if the instrument measures the intended concept (Heale & Twycross 2015)

Construct validity

The extent to which a research instrument measures the intended construct (Heale & Twycross 2015)

Reliability

Reliability is defined as the consistency of a measure (Heale & Twycross 2015)

1.11 CHAPTER SUMMARY

This current chapter is meant to be an introduction towards the subject matter, with current issues plaguing it, with plans for investigation and possible solution. Theoretical framework provides a summary of problems that will be addressed. The research questions, objectives and hypotheses are also discussed in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

My current study is to assess the knowledge, attitude and practice of professionalism in anaesthesia. This literature review will cover topics such as domains in professionalism, how to evaluate professionalism, how professionalism is taught, the positive aspects of being proficient in professionalism and professionalism in anaesthesia in Malaysia.

2.2 DOMAINS IN PROFESSIONALISM

Teaching professionalism into the medical curricula may be an uphill battle as it can be confusing. One of the reasons for this is the multiple interpretations regarding professionalism and no consensus regarding the elements in professionalism is determined. (van Mook et al, 2009) It can differ even from the matter of perspective.

Professionalism incorporates many key elements in which many authors have used to classify. The ACGME classified professionalism into compassion, altruism, accountability, excellence, ethics, respect for patient autonomy & sensitivity to diversity. (Swing, 2007) ABIM divided into six domains: altruism, accountability, excellence, duty, honour and integrity and respect for others. (ABIM, 2005) The Canadian Medical Association in 2001 includes competence, ethical behaviour, integrity, honesty, altruism, service to others, adherence to professional codes, justice, respect for others, self-regulation as domains seen by doctors who are proficient in professionalism. In 2005, the Royal College of Physicians in the UK in their Working Group Report included integrity, compassion, altruism, and excellence as their

principals for professionalism. The following values of professionalism: respect, trust, compassion, altruism, integrity, advocacy and justice, accountability, protection of confidentiality, leadership, collaboration, advancing knowledge and innovation, teaching, mentoring and collegiality, and practising and promoting responsible stewardship of health care resources are listed in the Australian Medical Association. In 2005 and 2015 the following values: integrity, honesty, altruism, humility, respect for diversity, and transparency were cited by the Royal College of Physicians & Surgeons of Canada as the principals seen in professionalism. The Canadian Medical Association states that the values of compassion, beneficence, non-maleficence, respect for persons and justice are important in professionalism. Through all these bodies' attempt to define professionalism in their way, many themes were recurrent & overlapping. (Yang, 2017) In 2002, the European Federation of Internal Medicine (EFIM), the American College of Physicians and the American Society of Internal Medicine (ACP-ASIM), and the American Board of Internal Medicine (ABIM) came up with the Physician's charter that consists of values such as primacy of patients' welfare, patients' autonomy, and social justice but with multiple subset of values.(Campbell, 2007) The Academy of Medicine of Malaysia has these few characteristics in mind when it comes to professionalism; namely intergrity, ethical, respect, accountability, confidentiality, communication & obligation to teach (Teoh, 2007; Academy of Malaysia, 2016) All in all, the subset of values can be further simplified into compassion, communication, expertise & ethics; which would be explored in this study.

The domain of professionalism is varied, and this shows that there is room for determining the core values in professionalism. This study shall attempt to investigate if core values such as awareness, confidentiality, insightful, respectful, altruism,