# COPING IN MEDICAL PROFESSIONALISM AND MENTAL WELLBEING AMONG UNIVERSITI SAINS MALAYSIA MEDICAL STUDENTS

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# COPING IN MEDICAL PROFESSIONALISM AND MENTAL WELLBEING AMONG UNIVERSITI SAINS MALAYSIA MEDICAL STUDENTS

**by**

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## LIST OF SYMBOLS

| | |
|---|---|
| Cronbach's α | Cronbach's alpha |
| n | Sample size |
| p | p-value |
| $\chi$2/df | Chi-square/degree of freedom |
| (→) | A direction arrow |
| ≥ | Greater than or equal to |
| > | Greater than |
| < | Less than |
| λ | Lambda |
| i | Item |
| Ɛ | Respective error variance |

## LIST OF ABBREVIATIONS

| | |
|---|---|
| ABIM | American Board of Internal Medicine |
| AMOS | Analysis of Moment Structure |
| ACGME | Accreditation Council for Graduate Medical Education |
| APA | American Psychological Association |
| AVE | Average Variance Extracted |
| CBI | Copenhagen Burnout Inventory |
| CFA | Confirmatory factor analysis |
| CFI | Comparative Fit Index |
| CI | Confidence interval |
| COPE | Coping Orientation to Problems Experienced |
| COREQ | Consolidated Criteria for Reporting Qualitative Studies |
| GPA | Grade Point Average |
| JEPeM | Jawatankuasa Etika Penyelidikan Manusia |
| NCSs | Negative coping strategies |
| PCSs | Positive coping strategies |
| RMSEA | Root Mean Square of Error Approximation |
| S-CVI/Ave | Scale/module-level CVIs using the average calculation method |
| S-CVI/UA | Scale/module-level CVIs using the universal agreement method |
| S-FVI(Ave) | Scale/module FVI using the average calculation method |
| S-FVI/UA | Scale/module FVI using the universal agreement method |
| SD | Standard deviation |
| SPSS | Statistical Software for the Social Sciences |
| TLI | Tucker-Lewis Index |

| | |
|---|---|
| UK | United Kingdom |
| US | United States |
| USM | Universiti Sains Malaysia |

## LIST OF APPENDICES

**DAYA TINDAK DALAM PROFESIONALISME PERUBATAN DAN KESEJAHTERAAN MENTAL DALAM KALANGAN PELAJAR PERUBATAN DI UNIVERSITI SAINS MALAYSIA**

## ABSTRAK

Objektif utama pendidikan perubatan adalah untuk membentuk pelajar dengan kesejahteraan mental dan kompetensi profesional yang baik untuk mereka berkhidmat kepada masyarakat dengan berkesan. Walau bagaimanapun, perjalanan pelajar perubatan tidak terlepas dari cabaran psikologi. Kebimbangan mengenai kesejahteraan mental (KSM) pelajar dan kesannya terhadap profesionalisme perubatan (PP) adalah meluas. Kajian menunjukkan bahawa mengamalkan strategi daya tindak (SDT) yang berkesan dapat membantu pelajar mengatasi cabaran dan mengekalkan profesionalisme mereka. Kajian ini meneroka bagaimana SDT mempengaruhi KSM dan PP dalam kalangan pelajar perubatan pra-siswazah, dengan menggunakan pendekatan campuran exploratori berurutan. Dalam fasa satu, data kualitatif dikumpulkan melalui *scoping review* (ScR) dan perbincangan kumpulan fokus (PKF), dengan memberi tumpuan kepada tiga komponen utama iaitu SP, KSM, dan PP. Fasa dua melibatkan pembinaan model hipotetikal yang menggambarkan hubungan antara SDT, KSM, dan PP, dipandu oleh hasil dapatan dari fasa satu. Enam pakar pendidikan perubatan mengesahkan konsep, teori, dan rangka kerja asas model tersebut. Dalam fasa seterusnya, data kuantitatif dari kajian keratan rentas yang melibatkan 234 pelajar dikumpulkan menggunakan lima inventori iaitu Inventori Dundee, DASS-9, Brief COPE, CBI, dan TEQ. Pemodelan persamaan struktur (SEM) dilakukan untuk menilai hubungan sebab-akibat antara SDT, KSM, dan PP. Penemuan dari fasa satu menekankan kepentingan 'hormat' dalam memelihara PP, manakala atribut seperti

altruisme, akauntabiliti, kecemerlangan tugas, kehormatan, integriti, dan hormat kepada orang lain adalah fokus dalam pentaksiran PP. Gangguan psikologi, termasuk stres, kegelisahan, dan kemurungan serta kelesuan, muncul sebagai manifestasi umum bagi masalah KSM. Didapati, pelajar yang mengalami masalah KSM mengenalpasti sokongan sebagai SDT utama. Tambahan pula, kelesuan didapati berkait secara songsang dengan empati. Semasa fasa dua, model hipotetikal mendedahkan bagaimana SDT, KSM, dan PP berhubungan, dengan merujuk kepada sintesis bukti dari ScR, PKF, dan panel pakar. Analisis SEM seterusnya mendedahkan bahawa tingkah laku profesional menunjukkan korelasi songsang dengan kelesuan, dengan SDT negatif memburukkan keadaan ini, manakala SDT positif melindungi empati. Kajian ini menekankan kepentingan belas kasihan terhadap diri sendiri dan empati dalam mengurangkan kelesuan dan meningkatkan kepuasan profesional. Selain itu, ia menekankan impak buruk oleh masalah KSM terhadap PP. Walaupun mencipta program yang menyeluruh untuk profesionalisme perubatan adalah tugas yang mencabar, penting bagi fakulti perubatan untuk bermula dengan aktiviti-aktiviti asas yang menitikberatkan pengajaran aspek dasar profesionalisme, termasuk menetapkan definisi dan atribut yang berkaitan.

**COPING IN MEDICAL PROFESSIONALISM AND MENTAL WELLBEING AMONG UNIVERSITI SAINS MALAYSIA MEDICAL STUDENTS**

## ABSTRACT

The main aim of medical education is to cultivate students with good mental wellbeing and professional competence, equipping them to serve the community effectively. However, the journey of medical students is not without psychological challenges. Concerns about the mental wellbeing (MWB) of students and its impact on medical professionalism (MP) are widespread. Research indicates that adopting effective coping strategies (CSs) can help students navigate through adversity and maintain their professionalism. This study explores how CSs influence both MWB and MP among undergraduate medical students, employing an exploratory sequential mixed-method approach. In the phase one, qualitative data was gathered through scoping reviews (ScRs) and focus group discussions (FGDs), focusing on three key components - CSs, MWB, and MP. Phase two involved constructing a hypothetical model illustrating the interplay between CSs, MWB, and MP, guided by insights from phase one. Six medical education experts validated the model's core concepts, theories, and framework. In the subsequent phase, quantitative data from a cross-sectional survey involving 234 students were collected using five inventories - Dundee inventory, DASS-9, Brief COPE, CBI, and TEQ. Structural equation modelling (SEM) was performed to assess the causal relationships between CSs, MWB, and MP. The findings from phase one underscored the significance of 'respect' in nurturing MP, while attributes like altruism, accountability, duty excellence, honour, integrity, and respect for others were central in assessing MP. Psychological distress, including

stress, anxiety, and depression, along with burnout, emerged as common manifestations of MWB issues. Notably, students experiencing MWB issues identified support as a primary coping strategy. Additionally, burnout was found to be inversely associated with empathy. During phase two, the hypothetical model revealed how CSs, MWB, and MP are interconnected, drawing upon evidence synthesis from ScRs, FGDs and the expert panel. Subsequent SEM analysis revealed that professional behaviour showed an inverse correlation with burnout, with negative coping worsening the situation, while positive coping strategies protected empathy. The study highlighted the importance of self-compassion and empathy in alleviating burnout and enhancing professional satisfaction. Moreover, it highlighted the detrimental impact of MWB issues on MP. Although creating a comprehensive program for medical professionalism is a challenging task, it is important for medical faculties to start with foundational activities that emphasize teaching the fundamental aspects of professionalism, including defining relevant definitions and attribute

# CHAPTER 1

# INTRODUCTION

This chapter describes the background, problem statement, and significance of the study. Following the research questions are general and specific objectives. Furthermore, each measured variable under the operational definitions is explained at the end of the chapter.

## 1.1 Background

Students undergo a lot of psychological growth during their time in medical school, contributing to the widespread belief that the curriculum is demanding. During their time as undergraduates, medical students are proven to be exposed to a significant degree of stress (Singh, Hankins, & Weinman, 2004; Wilkinson, Gill, Fitzjohn, Palmer, & Mulder, 2006). Literature articulates that students' mental health declines shortly after enrolling in medical school and continues to deteriorate throughout their training (Rosal et al., 1997). According to the extensive findings of widespread literature, the prevalence of mental illness among medical students is significantly higher than that of the general population (L. N. Dyrbye et al., 2008; L. N. Dyrbye, Thomas, & Shanafelt, 2005; Yusoff, Rahim, & Yaacob, 2010). Moreover, a cohort study by (Yusoff, 2013) reported that significantly higher levels of stress (ranging between 11.8% and 19.9%) and depression (12% and 30%) were common throughout medical training as compared to before the beginning of medical training both in terms of prevalence and level.

The goal of medical education is to develop doctors who are both healthy and competent so that they can better serve the community (Cardinal & Kaell, 2017). Due

to the enormous future responsibilities as physicians, while being students, during their academic training time, they need to be trained exclusively for the times to come. This has been shown to harvest unfavourable consequences. The amount of information that medical students need to absorb in such a short period in order to perform well on their exams is exhausting (Yusoff, Rahim, Baba, Ismail, & Esa, 2012). However, healthcare personnel experience a variety of pressures in the medical environment, including those always present in medicine; long work shifts (Knauth, 2007), night shifts (Dembe, Erickson, Delbos, & Banks, 2005), and the ones that have emerged and risen to peak recently; stress, anxiety, depression (Nechita, Nechita, Pîrlog, & Rogoveanu, 2014), and including burnout which is an overlooked and underreported problem (Lacy & Chan, 2018).

Medical professionalism (MP) serves as a belief system that proclaims an essential role in establishing and delivering health care in society. MP also holds various behaviours, which can be pronounced as specific competencies. These include an obligation to carry out professional tasks and a devotion to ethical principles; the exercise of empathy, truthfulness, and respect for others; responsiveness to patient needs that surpass self-interest; respect for patient privacy and autonomy; accountability to patients, society, and profession; and sensitivity to a varied patient population. In reality, the medical profession is evolving so is the MP. As the distance between what doctors have been taught to accomplish and the reality of contemporary clinical practice widens, the significance of MP also amplifies. Moreover, a reduction in empathy during medical school and residency threatens the pursuit of professionalism and healthcare quality (Neumann et al., 2011).

Across the globe, MP has been defined differently depending on the cultural background; hence its definition is inconsistent across the literature. The American

Board of Internal Medicine states that professionalism "entails altruism, accountability, commitment to excellence, duty and commitment to service, honour, and respect for others" (ABIM, 2002). It is also considered to comprise three main discourses of individual, interpersonal, and societal constructs.

The mental wellbeing (MWB) of medical students is currently receiving much attention worldwide, mainly because of the critical role they will play as the foundation of any future healthcare system (Jafari, Loghmani, & Montazeri, 2012; Volpe et al., 2019). It is evident that mental wellbeing issues (MWBi) like psychological distress (stress, anxiety, depression) and burnout among healthcare personnel prevail (Botha, Gwin, & Purpora, 2015; Shanafelt et al., 2012). Hence, unidentified and untreated burnout and a distressed life are sure to hurt their health (individual), their performance (interpersonal), and their level of care for patients (societal). It is still not fully understood how the above relationships work.

At the undergraduate level, utilisation of coping strategies (CSs) for discrete mindfulness and the level of medical students' mental wellbeing (MWB) might play a crucial role in leading them towards MP attributes or even an unprofessional act (i.e., professionalism laps). Such an imperative association between CSs, MWB, and MP has not yet been explained. Hence, it demands an explicit exploration of the interrelations of all three (i.e., CSs, MWB, and MP) among undergraduate medical students.

## 1.2 Problem statement

Medical licensing bodies in many countries have regulations for unprofessional behaviour among physicians. Recent reports from around the world have highlighted the growing problem of unprofessional behaviour (Boyle, 2017;

Farley & Sprigg, 2014). Academic medicine is not immune to this problem; hence, unprofessional behaviour has been observed in academic medicine, and it has been reported by medical students, residents, and professors (Fnais et al., 2014; Rouse, Gallagher-Garza, Gebhard, Harrison, & Wallace, 2016).

In recent decades, there has been increased scrutiny and criticism of the medical profession for perceived and actual breaches of professional behaviour. Several studies have been done on unprofessional conduct among trainee doctors. Research by Resnick et al. in 2006 found that professional misconduct is common among US general surgery residents and can lead to their dismissal from the training programme (Resnick, Mullen, Kaiser, & Morris, 2006). However, challenges of unprofessional behaviour are not present only when a person qualifies as a physician. Literature and medical authorities highlight that the root lies deep in medical students' early years of training. The General Medical Council emphasises cultivating professional behaviours among medical students from their early undergraduate years (GMC, 2009). There have been widespread concerns regarding the students' decline in professionalism (Kelly, Mullan, & Gruppen, 2016) and its connections with lowered job performance and burnout (Dale & Olds, 2012). The importance of MP is receiving renewed attention among healthcare personnel and society to address these concerns and for growing awareness of the social responsibility of medicine. Furthermore, it has become increasingly apparent and widely accepted in recent years that the best course of action is to return medical education and practice to its essential values of professionalism (Bahaziq & Crosby, 2011). It is, therefore, essential to enhance students' learning around the attributes of MP during undergraduate medical education (Sattar, Roff, & Meo, 2016).

Frequent cases of medical students engaging in misconduct have sparked increased public attention and concern when they fail to uphold their professional standards (Vengoechea, Moreno, & Ruiz, 2008). Although many large-scale studies have explored MWB issues among medical students concurrently, the interrelationship of MP and MWB has not been fully explored.

A growing body of research shows that coping, defined as efforts to manage the demands of stressful events through action and intrapsychic effort, significantly impacts the mental and physical health of those who experience stress (Taylor & Stanton, 2007).

Students in medical school frequently report feeling emotionally distressed. They experience high levels of stress (Heinen, Bullinger, & Kocalevent, 2017). Although a large number of studies have focused on isolated aspects of the stress that medical students face, such as the sources of that stress or the CSs they use (Dyrbye, Thomas, & Shanafelt, 2006), the roles of CSs over the MWB and MP is still unknown.

Therefore, this study aims to elucidate the roles of coping (either as mediator or moderator) in the interrelationship of MWB and MP for undergraduate medical students. Once these roles are explained, then through coping, the students' strategies to handle MWB issues, as well as their perception of professionalism, could be addressed. This shall help medical schools plan appropriate strategies to produce 'wellbeing doctors' who can care for the patients' and the community's needs.

## 1.3 Significance of the study

i. The findings from Phase 1 are essential in identifying generic attributes of MP, frequently utilised and effective functional CSs, and commonly occurring MWBi during undergraduate medical education.

ii. Our findings shall help fill gaps in the literature pertaining to the knowledge of the interrelationships of CSs, MP, and MWBi.

iii. The final model based on the interrelationship of CSs, MP attributes, and MWBi shall guide health stakeholders to make essential additions to the current medical education curriculum.

## 1.4 Phases of the study

Constructing on the introduction and gaps above, this study was conducted in three phases:

i. Phase 1: Exploration of generic MP attributes, effective CSs, and essential MWBi based on three scoping reviews (ScRs) and focus group discussions (FGDs).

ii. Phase 2: Development of a hypothetical conceptual model based on the findings from Phase 1. A panel of experts will verify the conceptual model's underlying principles, theories, or framework.

**iii.** Phase 3: The causal-effect relationships between MP, CSs, and MWB, based on the final conceptual model, will be tested for the model fit through the structural equation modelling (SEM) techniques.

## 1.5 Research questions

The research questions are listed based on the specific objectives.

Phase 1: Exploration

1.1 What are the generic attributes of MP most frequently highlighted in an undergraduate medical education context?

1.2 What are the effective CSs in undergraduate medical education?

1.3 What are the essential MWBi and their relationship with MP?

Phase 2: Model development

2.1 What hypothetical relationships exist between MP, CSs, and MWBi among undergraduate medical students?

2.2 What is the best conceptual model to represent the relationships of MP, CSs, and MWBi?

Phase 3: Evaluation of model

3.1 Can the final model guide a better understanding of the relationships between MP, CSs, and MWBi?

3.2 How authentic is the final model in rectifying the relationships between MP, CSs, and MWBi in the actual context?

## 1.6 General objectives

To explore the roles of CSs on the interrelationship of MP and MWBi among undergraduate medical students.

## 1.7 Specific objectives

Phase 1: Exploration

1.1 Identify generic MP attributes, effective CSs, and essential MWBi in medical education.

Phase 2: Model development

2.1 Construct a hypothetical model of interrelations between MP, CSs, and MWBi in medical education.

2.2 Design a conceptual model based on hypothetical interrelations.

Phase 3: Model evaluation

3.1 Examine the causal-effect relationship of MP, CSs, and MWBi based on the conceptual model using structural equation modelling.

3.2 To determine the model fit of the model.

3.3 To establish an underlying explanation of the roles of coping on MP and MWBi in medical students based on their experience guided by the causal-effect relationship model.

## 1.8 Operational definitions

### 1.8.1 Medical professionalism

The American Board of Internal Medicine (ABIM, 2002) states that professionalism "entails altruism, accountability, commitment to excellence, duty and commitment to service, honour, and respect for others." Furthermore, Cruess, Johnston, and Cruess (2004) stress the social contract characteristic of professionalism, and Stern and Papadakis (2006) state that it is “established through a foundation of clinical competence, communication skills and ethical and legal consideration on which is built excellence, humanism, accountability, and altruism.”

We utilised Dundee Polyprofessionalism Inventory I: Academic Integrity items (Roff & Dherwani, 2011) to collect students’ responses concerning the

recommended sanctions for professionalism lapses during undergraduate medical education.

Empathy is contained within this conceptualisation. Consequently, there is no single instrument to amount professionalism. A multidimensional approach is suggested, depending on which element is being measured: for instance, knowledge-based exams for ethics, attitude surveys for empathy, 360-degree evaluations by peers and other health professionals to evaluate behaviour Stern and Papadakis (2006) portfolios of professional improvement (Buckley et al., 2009) or service activities, (Henry, Marquez, & Kuo, 2009) or surveys on the setting of professionalism in an institution (Quaintance, Arnold, & Thompson, 2008). We utilised the Toronto Empathy Questionnaire (Spreng, McKinnon, Mar, & Levine, 2009) for collecting responses concerning empathy.

### 1.8.2 Mental wellbeing

The World Health Organisation (WHO) states, “Mental health is not just the absence of mental disorder. It is defined as a state of wellbeing in which every individual realises their potential, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to their community.” (WHO, 2004). MWB is the capacity to deal with difficult situations (CSs) by maintaining control over one's thoughts and feelings to carry on with one's goals and conduct (MP) according to one's values.

MWB of medical students worldwide is becoming an increasingly pressing issue. The General Medical Council of the United Kingdom found a fifty per cent increase in mental health problems among medical students in the United Kingdom (BMA, 2013). Furthermore, according to Yusoff, Hadie, and Yasin (2021b), it is typical for medical students in Malaysia and elsewhere in the world to experience

mental health problems due to psychological distress and burnout. Yusoff et al. (2021b) also mentioned that psychological distress directly affects the increasing levels of burnout experienced by medical students. Hence, the following sections will deal, first with facets of psychological distress (Depression, anxiety, and stress) and then burnout.

### 1.8.3 Psychological distress

#### 1.8.3(a) Depression

Depression is a prolonged and recurring sadness or loss of pleasure, ultimately hindering a person's overall ability to work, learn, or cope with daily life. According to the World Health Organization, the global prevalence of depression is currently 4.4 per cent. However, depression is reported to be 3-10 times more prevalent in medical students (11.5-48.2 per cent) (Al-Faris et al., 2012; Kongsomboon, 2010; WHO, 2017). Among medical students, depression has been reported globally (Baldassin, Alves, de Andrade, & Nogueira Martins, 2008; Schwenk, Davis, & Wimsatt, 2010). Medical students have high rates of depression (Dyrbye et al., 2006), and it is the most serious mental health issue among medical students because it affects their daily lives, academic performance, and patient care (Mihăilescu, Diaconescu, Ciobanu, Donisan, & Mihailescu, 2016). The Depression, Anxiety, and Stress Scale (DASS-9) (Yusoff, 2013) items are used as a screening instrument in this study because a proper valuation of issues associated with depression is required.

#### 1.8.3(b) Anxiety

Greek and Latin physicians and philosophers identified anxiety as a medical disorder, distinguished it from other types of negative affect and distinguished it as a specific condition (Crocq, 2015). Medical students tend to be resilient despite many pressure factors, e.g., long study hours, exam pressures, peer pressures and personal

and professional elements. Yet, the accumulation of many such stressors pushes them to have anxiety. It was reported that, in Europe, around 30% of medical students suffer from depression or anxiety (Haldorsen, Bak, Dissing, & Petersson, 2014). This situation mirrors a rate stated by Brazilian studies, in which 20 to 50% of medical students were found to have mood disorders (Bassols et al., 2014). Our study used the DASS-9 screening test to gauge participants' anxiety levels. A positive screening result does not necessarily imply a diagnosis of anxiety; rather, it indicates the presence and severity of certain symptoms (Lovibond & Lovibond, 1995).

### 1.8.3(c) Stress

The term ‘stress’ was coined in 1936 (Peters, McEwen, & Friston, 2017). It is defined in a variety of ways, ranging from objectively threatening characteristics of the environment, and stressful life events, to individuals' (subjective) assessments of the threat that an environment poses to them to the activation of physiological systems that support the behaviours (e.g., fight or flight) necessary to respond to that threat (Cohen, Gianaros, & Manuck, 2016). Stress disorder is a significant issue for students in tertiary education (Othman, Farooqui, Yusoff, & Adawiyah, 2013). In short, stress encompasses the emotional clashes or changes caused by stressors. Based on previous studies, it is stated that the 'stress prevalence' among medical students is widespread. Moreover, Shapiro, Shapiro, and Schwartz (2000) recorded that although there is significant literature on stress management in general, their specific presentation to medical education has been mainly unexplored. Stress, like depression and anxiety, is measured in this study using a screening instrument called the DASS-9.

### 1.8.4 Burnout

This is a state of mental and physical exhaustion. Emotional exhaustion, cynicism, depersonalisation, and reductions in personal achievement and efficiency

all account for burnout (Ishak et al., 2009; Maslach & Jackson, 1981). Burnout has become a regular happening in medical schools, with as many as 50% of medical students suffering from significant burnout (Dyrbye et al., 2008). Burnout is reported to be associated with unprofessional behaviours (Liselotte N. Dyrbye et al., 2010). Furthermore, according to (Papadakis, Hodgson, Teherani, & Kohatsu, 2004), the state board remedial actions happened more to those students who exhibited unprofessional behaviour during their medical school time. This study measures burnout using the Copenhagen Burnout Inventory (CBI) items related to personal and work-related domains (Yusoff, Hadie, & Yasin, 2021a).

### 1.8.5 Coping

Coping denotes mental, emotional, and behavioural struggles to tackle a troubled person-environment association (Folkman & Lazarus, 1985). Therefore, CSs are vital for wellbeing (Kraag, Zeegers, Kok, Hosman, & Abu-Saad, 2006). Coping in various ways (problem resolving, positive judgement and expression of feelings) tends to be used by students to confront adverse circumstances. These strategies enable students to adapt to challenging situations relatively better (Curlin, Lantos, Roach, Sellergren, & Chin, 2005), reduce their anxiety and depression, and promote their MWB (Maslach, Schaufeli, & Leiter, 2001). CSs are positive and negative (Sun, Jiang, Jia, & Li, 2019), and common CSs include support (social and emotional) seeking, active coping, acceptance, avoidance, substance abuse, faith and religion, sports, sleeping, isolation, and self-blame (Sattar, Yusoff, Arifin, Yasin, & Nor, 2022). The Brief COPE inventory items were used to measure students' ways of coping with a stressful life event.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Introduction

The first section of this chapter provides an overview of medical professionalism (MP), which, although the foundation for patient-physician partnerships, is becoming a developing concern in medical education. Furthermore, this chapter briefly explores other predominant issues related to mental wellbeing (MWB) among medical students, such as burnout, anxiety, depression, and stress. The subsequent chapter analyses the undergraduate medical students' susceptibility to developing mental wellbeing issues. The later sections then elaborate on coping strategies (CSs) which grasp a growing focus in current literature to treat adversities. At the end of this chapter, a conceptual framework is proposed to highlight the gaps in the current knowledge about the interrelationship of MP, MWB and CSs and to summarise the main ideas from the literature research.

## 2.2 Medical professionalism among undergraduate medical students

### 2.2.1 Introduction

Medical professionalism (MP) has rich historical roots, and to define it, many attempts have been made (Benatar, 1997; Blank, Kimball, McDonald, & Merino, 2003; Van De Camp, Vernooij-Dassen, Grol, & Bottema, 2004). Yet, the concept resists any magic formula. On the other hand, it refers to a set of attitudes, behaviours and mindsets.

The American Board of Internal Medicine (ABIM, 2002) Monograph ranks six fundamentals of professionalism (i.e., altruism, accountability, excellence, duty, honour and integrity, and respect for others).

Professionalism in medicine implies the association between medicine and society as it builds the foundation of patient-physician relationships. According to the physician charter (ABIM, 2002), an international consortium was formed by three prominent medical organisations: the American Board of Internal Medicine, the American College of Physicians and American Society of Internal Medicine, and the European Federation of Internal Medicine, professionalism symbolises to the set of skills, values, and behaviours that demonstrate the true spirit of humanism in professional work. The professionalism charter comprising professional responsibilities (Table 2.1) was published in 2002 and has later been embraced by many key specialised physician organisations (ABIM, 2002).

Table 2.1Professional obligations specified by the charter on professionalism (ABIM, 2002)

| |
|---|
| • "Commitment to professional competence." |
| • "Commitment to honesty with patients." |
| • "Commitment to patient confidentiality." |
| • "Commitment to maintaining appropriate relations with patients." |
| • "Commitment to improving the quality of care." |
| • "Commitment to improving access to care." |
| • "Commitment to a just distribution of finite resources." |
| • "Commitment to scientific knowledge." |
| • "Commitment to maintaining trust by managing conflicts of interest." |
| • "Commitment to professional responsibilities." |

Multiple audiences expect physicians and medical educators to exhibit professional behaviour consistently. The definition of professionalism provided by Epstein and Hundert (2002) is very practical, "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."

Professionalism requirements (Table 2.2), applicable to all specialities, that must be taught throughout residency or fellowship training were established in 1999 by the Accreditation Council for Graduate Medical Education (ACGME, 1999). One of the six stated skills is professionalism.

Table 2.2 Obligations of professionalism by the Accreditation Council for Graduate Medical Education (ACGME, 1999)

| Residents are expected to: |
| --- |
| • "Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and ongoing professional development." |
| • "Demonstrate a commitment to ethical principles pertaining to the provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices." |
| • "Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities." |

A profession necessitates acquiring and applying a corpus of knowledge and technical expertise. A shared commitment binds individuals within a profession together—members of a profession self-regulate. In medicine, clinicians self-regulate via state medical boards, hospital committees, and other peer-review organisations. The members of a profession adhere to a code of ethics. Therefore, it is believed that

medical professionalism has a contract with society, and for medical students as learners, practising doctors, and lifelong learners, skill is a core competency (Sattar, Akram, Ahmad, & Bashir, 2021). Some have compared the relationship between medicine and community to a social contract. The services of the healer, ensured competence, altruistic service, morality and integrity, responsibility, transparency, impartial guidance, and promotion of the public good are some of the societal expectations placed on medicine by society. Moreover, a "formal relationship with several responsibilities and standards based on mutual trust between the society and medicine" is the cornerstone of medical professionalism (S. R. Cruess, 2006).

### 2.2.2 Medical professionalism in different cultural contexts

Other than the issue of the non-availability of a unanimously agreed upon definition (Bhugra & Malik, 2010; O'sullivan, Van Mook, Fewtrell, & Wass, 2012) of medical professionalism, its nature of being culturally sensitive is also an issue of discussion. Moreover, the importance placed on maintaining a professional demeanour in the medical field has, as a consequence of increased globalization, begun to be recognized in other regions of the world.

Medical professionalism is a culturally sensitive construct and a complex societal model. Geographical settings and culture are essential in any argument about professional behaviour (Sattar, Roff, & Meo, 2016). Due to different cultural norms, many regional similarities and variances can be observed in the definition of professionalism (Chandratilake, McAleer, & Gibson, 2012; Jha, Mclean, Gibbs, & Sandars, 2015).

Since professionalism is a culturally sensitive construct, it is interpreted and articulated under regional norms, religious beliefs, and cultural practises (Chandratilake et al., 2012; S.R. Cruess, Cruess, & Steinert, 2010). Therefore, no

single theoretical framework is appropriate for professionalism (Ho, 2013). Because of the conceptual differences in professionalism, it can be difficult for these teachings to be accepted in healthcare settings in many cultures and different parts of the world. In addition, various choices, dislikes, and conflicts in professionalism evaluations can be found in defining professionalism due to the predominating social or cultural variations (Cohen, 2007; Ho & Al-Eraky, 2016).

Because of this, there is now a widespread movement towards rethinking the way professionalism is taught in schools all over the world, and as a direct consequence of this, professionalism is a required part of educational programmes for medical students (ACGME, 2011; Project, 1995; Zaini et al., 2011). Professionalism advancement of undergraduate medical students was emphasised, and Sattar et al. (2021) proposed components for students' teaching based on ABIM's main aspects of Professionalism (Figure 2.1).

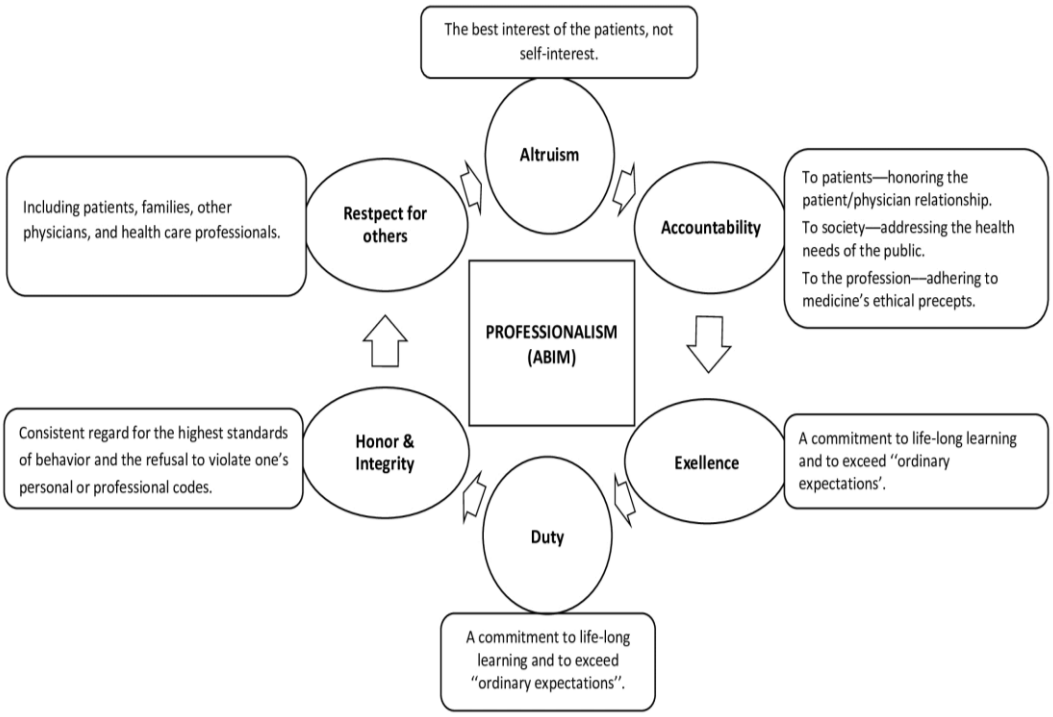


Figure 2.1 Proposed components for students' teaching founded on ABIM essential elements of Professionalism (Sattar et al., 2021)

However, as medical educators, we are responsible for assessing whether the concept of medical professionalism, understood in the West, can be successfully translated to other cultural settings without causing issues or being rejected. So, does one size fit all? The answer to this question is found as Ho, Yu, Hirsh, Huang, and Yang (2011) concluded that it is essential to have a method for constructing a professionalism framework that considers the cultural context and the beliefs of the local community members.

### 2.2.3 Implication of medical professionalism and challenges

In recent years, professionalism has arisen as a recurrent topic, and there has been a discernible rise in the amount of attention paid to the subject of professionalism concerning medical education and practice (Blumenthal, 1994; Board, 1999; S. R. Cruess & Cruess, 1997; Hensel & Dickey, 1998; Relman, 1998; Sattar, Roff, Siddiqui, & Meo, 2017; Sattar & Yusoff, 2020; Swick, 1998).

Maxine Papadakis and colleagues undertook a case-control study to establish whether or not there is a connection between students' performance in medical school and subsequent unprofessional behaviour, labelled as corrective action by a medical board (Papadakis et al., 2005). According to the findings, students who engaged in unprofessional conduct while attending medical school were subjected to disciplinary action at a rate three times higher than their peers who did not. This study provided evidence of a pressing need to educate people about professionalism and recognise and address unprofessional behaviour. It demonstrated that if a student or resident is repeatedly tardy or fails to follow through (both forms of negligence), those acts should be taken critically, and appropriate disciplinary measures should be implemented.

### 2.2.3(a) Transferring from values to behaviours

Literature, including the most famous professional oath (the well-known Hippocratic Oath) (Marketos, Diamandopoulos, Bartsocas, Poulakou, & Koutras, 1996), considers medical professionalism to be related to a set of values. The moral principles that form the basis of these oaths have steadily shifted over several centuries, in tandem with the development of the medical profession in contemporary and postmodern societies (Both & Association, 2004; Crawshaw & Link, 1996; Gill & Griffin, 2010; Tallis, 2006). Usually, it is challenging to examine and gauge values. It is commonly held that students either inherit their values from their families or bring them with them when they enter the profession and that these values are immutable. On the other hand, behaviours may be seen and evaluated objectively. It is less intimidating to tell someone they engaged in behaviour that deviates from what should have been expected of them in a particular setting. It is also simpler to explain to the person precisely what should be done, which makes it simpler for the person to make the necessary corrections.

Despite the shift in emphasis away from values and towards behaviours, the overall principles are not forgotten in the process. Not only does helpful feedback describe what should be done, but it also indicates why it should be done, which brings us back to the value. On the other hand, educators have access to more knowledge and a greater capacity to act on it when they begin with behaviours. We even see a contradiction to this narrative as Wynia, Papadakis, Sullivan, and Hafferty (2014) stated that rather than embracing a list of required values and behaviours, medical professionalism is a belief system that motivates therapists to collaborate in groups and frequently among occupational lines, to build and uphold combined commitments. According to a second version of this story, professionalism is all about the

characteristics of a profession, the attributes, behaviours, and commitments that make up a career (Figure 2.2). As a result, a conscious effort to instil the attributes, behaviours, and commitments (ABCs) of professionalism is a necessary component of medical education (Sattar, 2019).

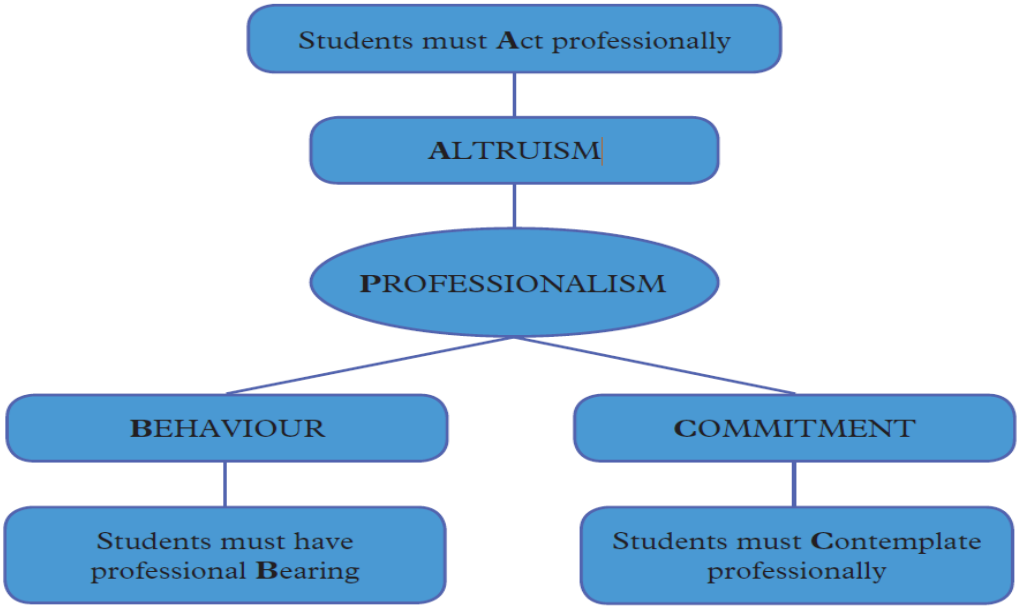


Figure 2.2 ABC of professionalism (Sattar, 2019)

As a result of these changing understandings, we now see medical professionalism from a different perspective. The definition of medical professionalism has been recently updated and clarified by some of the most prestigious medical organisations in the world (Both, 2004). The relationship between a patient and their physician has emerged as a significant concern. Moreover, a review report is compiled by many different medical associations in Europe and the United States (ABIM, 2002). Therefore, the importance of the doctor-patient interaction as a stand-in for accurate measurement of the role of medical professionalism is emphasised in the literature (Lillo, Cicchetti, Scalzo, Taroni, & Hojat, 2009; Hojat, 2007).

### 2.2.3(b) Professionalism and Hidden Curriculum

The “hidden curriculum” is another difficulty that is mentioned in the research that has been done on medical education. Even though a medical school or other institution is defining its fundamental beliefs, the people who work there may occasionally model unprofessional behaviours, which will undercut the educational goals. In the past, it was commonly believed that pupils were exposed to professionalism passively through “the hidden curriculum”, which left a great deal to be determined by random events (Sattar, 2019). On the other hand, as time has passed, the idea that students at medical schools need to be systematically taught and trained in the notions of professionalism has gained support and has been accepted as fact. To avoid the overwhelming effect of a hidden curriculum as a stand-alone resource for medical students’ learning of professionalism, the most important is to formulate clear curricular instructions with specific objectives. A graphical illustration of the course objectives that will lead to the professional growth of the students through the coordination of the teachers and students is depicted in Figure 2.3.

Clear objectives must be set, and they are to serve as the foundation for both the teachers' contributions and the students' accomplishments regarding the important concerns associated with medical professionalism (Sattar et al., 2021). This path needs to end up at the pinnacle of professional development for the learners, with the highest possible standards.

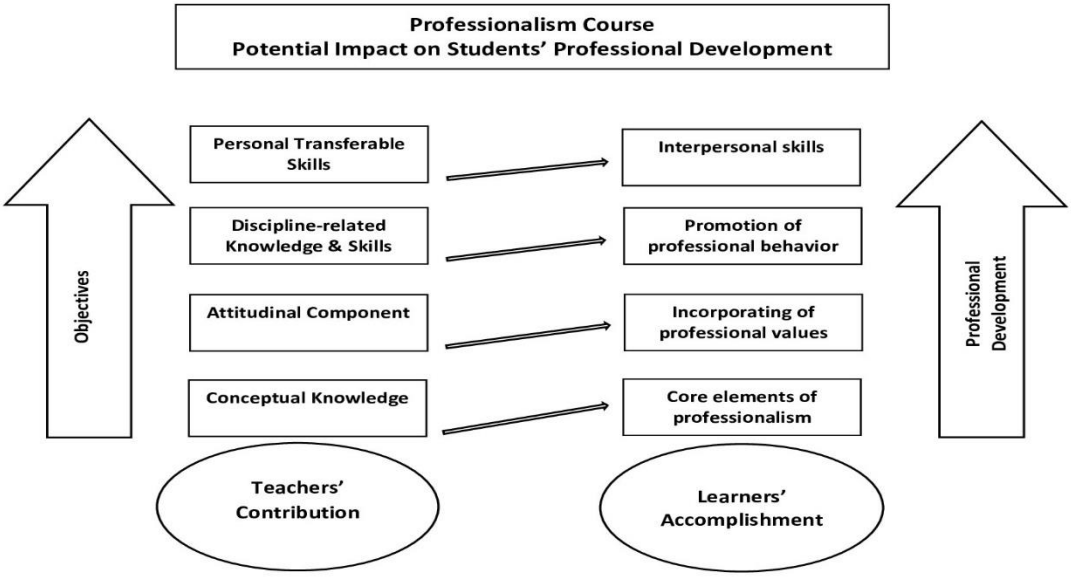


Figure 2.3 Graphic representation of course objectives that promote professional development through teacher-student collaboration (Sattar et al., 2021).

### 2.2.4 Constructs related to medical professionalism

As mentioned, literature evidence that numerous conceptions have resulted from attempts to define professionalism. As a result, there is no solitary method for measuring professionalism. A multidimensional approach is suggested, subject to which element is being measured: for example, knowledge-based exams for ethics, attitude surveys for empathy, 360-degree evaluations by peers and other health professionals to evaluate behaviour (Stern & Papadakis, 2006), portfolios for professional improvement (Buckley et al., 2009) or service activities, (Henry, Marquez, & Kuo, 2009) and surveys on the environment of professionalism in an institution (Quaintance, Arnold, & Thompson, 2008). The American Board of Internal Medicine (ABIM, 2002) states that professionalism entails "altruism, accountability, commitment to excellence, duty and commitment to service, honour, and respect for others." The researcher conducted a study and found eleven (61.11%) out of the 18 included studies focused mainly on "nurturing MP and related attributes." Among many such attributes, the most dominant one identified was 'respect' (Sattar, Yusoff,

Arifin, Yasin, & Nor, 2021). Furthermore, S. R. Cruess, Johnston, and Cruess (2004) emphasised the social contract characteristic of professionalism, and Stern & Papadakis (2006) state that it is "established through a foundation of clinical competence, communication skills and ethical and legal consideration on which is built excellence, humanism, accountability, and altruism." Furthermore, empathy is contained within this conceptualisation. Among the well-established main elements of MP, within the subsequent sections, we highlight the magnitude of altruism, which is often considered synonymous with medical professionalism. In the following section, we will elucidate the topic of empathy, which is an integral part of MP conceptualization.

### 2.2.4(a) Altruism

ABIM's 'Project Professionalism' was the initiative to determine the essential aspects of medical professionalism. One of those essential aspects is altruism, which can be defined as serving "the best interest of patients, not self-interest" (Project, 1995). During an exploratory qualitative study by Sajjad, Qayyum, Iltaf, and Khan (2021) to identify clinicians' understanding of altruism, they concluded that the perspectives on altruism differed. Opinions regarding it ranged from recognising that it had an excellent psychological influence on one end of the spectrum to considering that it was stressful and difficult to adhere to on the other end of the spectrum. Most people who participated in the study defined altruism as putting the needs of the sick ahead of their own. In addition, altruism is frequently included in both traditional and contemporary definitions of medical professionalism, and it is also believed that being altruistic is an essential quality for those who wish to pursue a career in medicine. Swick makes it quite clear that altruism is an integral component of the job in the medical field. "Values such as compassion, altruism, integrity, and trustworthiness are

so central to the nature of the physicians' work…. that no physician can truly be effective without holding deeply such values" (Swick, 2000). Contrary statements were also made during an effort by Harris (2018) to examine the past track of medical professionalism. They stated that arguments both for and against retaining altruism in the definition of medical professionalism are available. According to ethicists, it is impossible to practise medicine while adhering to the moral norm of beneficence, and many people believe that accepting payment for services will never allow for genuine altruism. There is a concern that the medical profession may see a rise in burnout due to working without regard for one's health.

Another intriguing theory connects gender with the element of altruism. There is a sense that the gender discussion in medicine also significantly sheds light on this element. More than 60% of medical students in the UK were female in 2006, indicating that medicine is becoming increasingly feminised (Linehan, Sweeney, Boylan, Meghen, & O'Flynn, 2013). Altruism has historically been seen as a characteristic of females in nurturing fields like nursing (Witz, 2013).

Marynissen and Spurrier (2018) utilised semi-structured qualitative face-to-face discussions with students from Leeds University Medical School, questioning participants to offer their explanation of altruism and then exploring students' views of altruism in clinical practice and the reputation of altruism as being 'good' doctors. They concluded that students, on the whole, did not perceive altruism to be a fundamental component of a doctor's job; instead, they regarded it as going "above and beyond" the call of duty. On the other hand, almost all participants stated that they would rather work with or become altruistic doctors. Students also frequently alluded to the concept of the "right balance of altruism" as a means to avoid overly sacrificing oneself to the point of burnout.