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Nurturing & Assessing
PROFESSIONALISM

Visiting Medical Education Scholar Webinar | Faculty of Medicine, Mahidol University

PROFESSIONALISM EDUCATION
Discuss professionalism education for nurturing a strong and credible professional identity

DISCUSS

PROFESSIONALISM ASSESSMENT
Examine authentic assessment approaches to assess professionalism

EXAMINE

ACTIONABLE STRATEGIES
Explore actionable strategies for cultivating authentic professionalism education and assessment

EXPLORE

Teachers have been identified as the key role players, the catalysts and the motivators to bring about the visionary educational outcomes.

(Malaysia Education Blueprint 2013-2025)

"Medical education consists of training aimed at ensuring physicians acquire the competencies, skills and aptitudes that allow them to **practice professionally and ethically at the highest level**."

"All physicians, the profession, medical faculties, educational institutions, and governments share the responsibility for guaranteeing that medical education meets a high-quality standard throughout the medical education continuum."

WORLD
MEDICAL
WMA ASSOCIATION

WHAT WE DO   POLICY   PUBLICATIONS   NEWS & PRESS   WHO WE ARE   JUNIOR DO

Policy / Current Policies / WMA Statement on Medical Education

WMA STATEMENT ON MEDICAL EDUCATION

Adopted by the 57th WMA General Assembly, Pilanesberg, South Africa, October 2006
and revised by the 68th WMA General Assembly, Chicago, United States, October 2017

Competency Framework

CanMeds (Canada)

- Medical expert
- Communicator
- Collaborator
- Manager
- Health advocate
- Scholar
- Professional

ACGME (US)

- Medical knowledge
- Patient care
- Practice-based learning and improvement
- Interpersonal and communication skills
- Professionalism
- Systems-based practice

GMC (UK)

- Good clinical care
- Relationships with patients and families
- Working with colleagues
- Managing the workplace
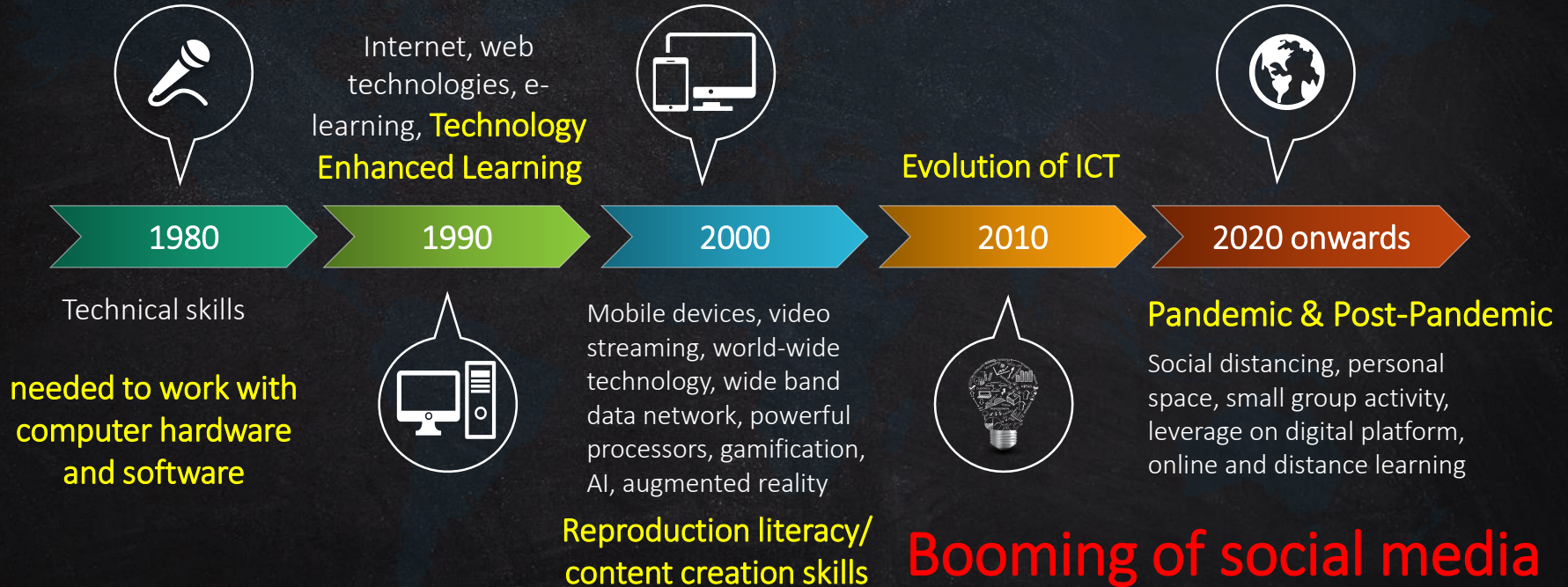- Social responsibility and accountability
- Professionalism

SEA-CALOHEA (ASEAN)

- Health & Wellbeing
- Integrated Medical Knowledge
- Clinical Practice
- Ethics & Humanities
- Quality Practice
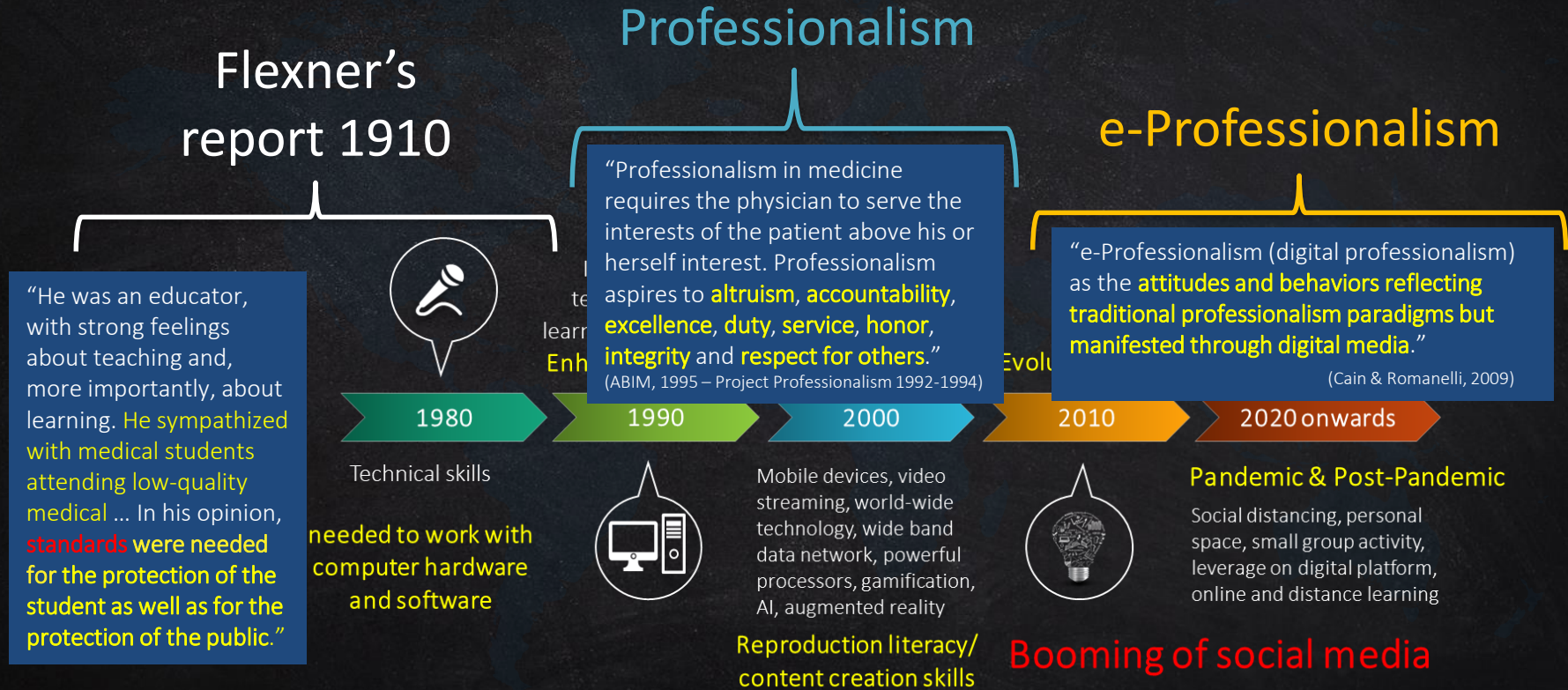- Professional Behaviors

MQF 2.0 (Malaysia)

- Knowledge and understanding
- Cognitive skills
- Functional work skills
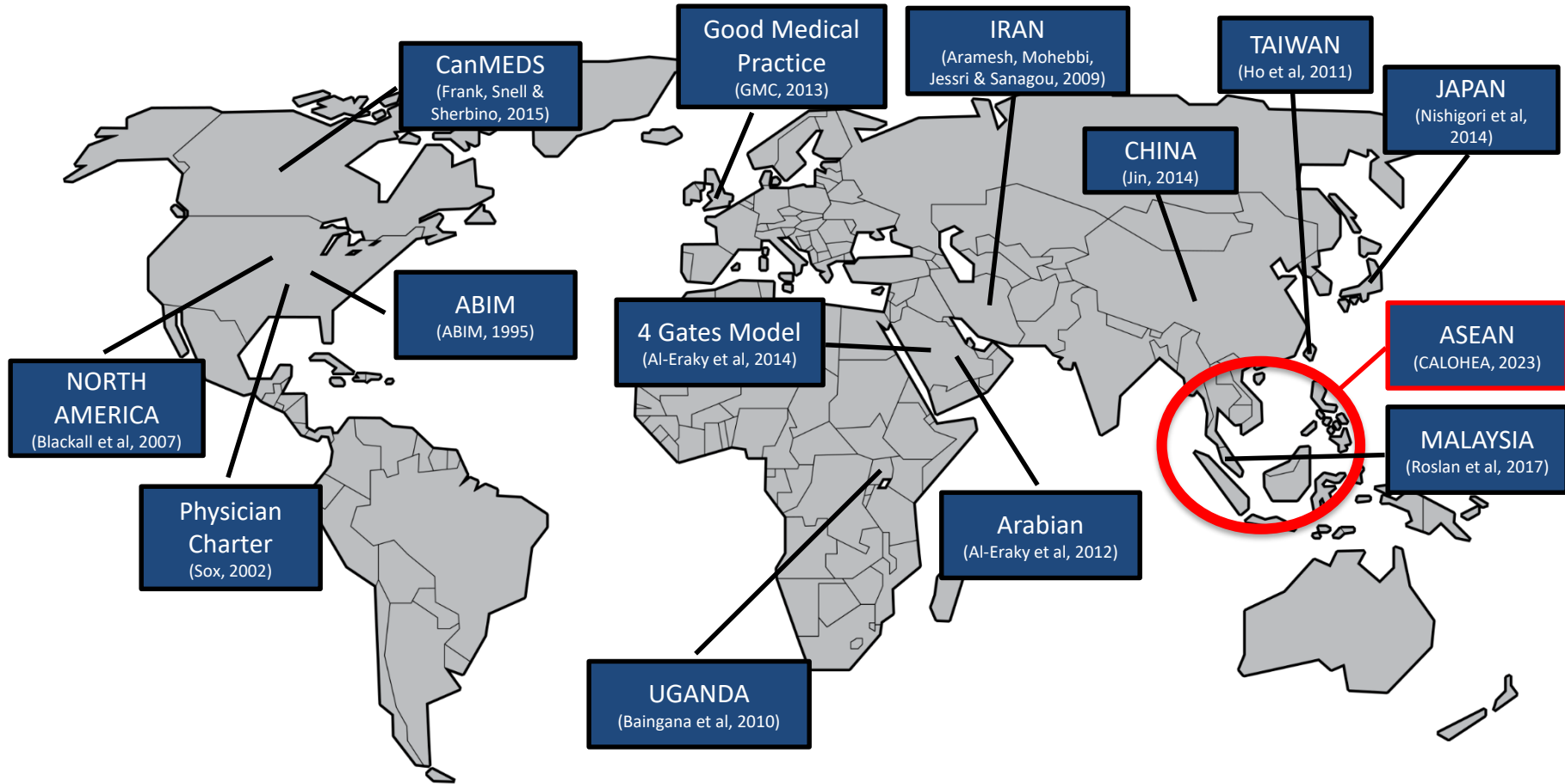- Personal and entrepreneurial skills
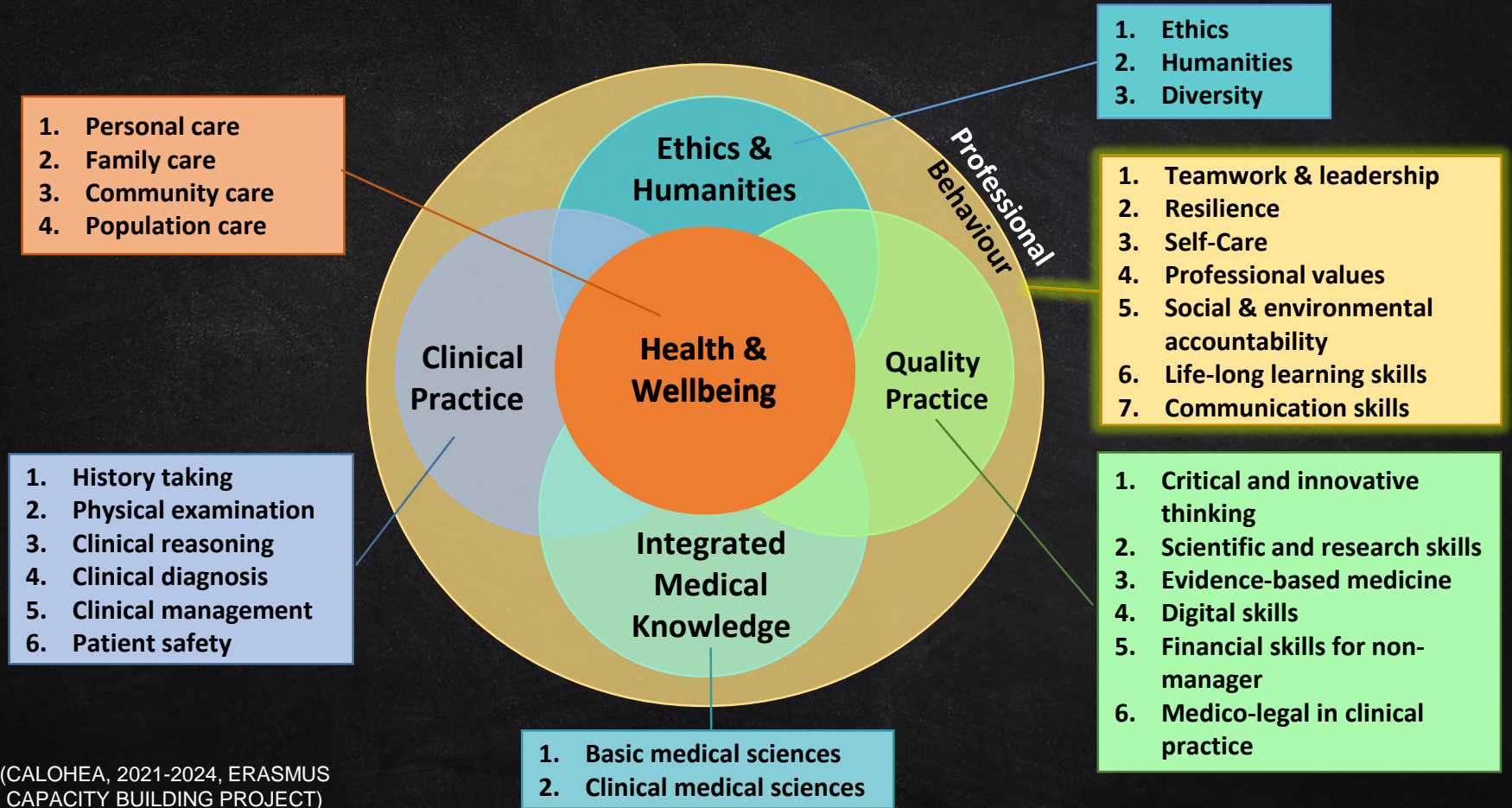- Ethics and Professionalism

FLEXNER, PROFESSIONALISM & DIGITAL ERA

Internet, web technologies, e-learning, Technology Enhanced Learning

Evolution of ICT

1980	1990	2000	2010	2020 onwards

Technical skills

needed to work with computer hardware and software

Mobile devices, video streaming, world-wide technology, wide band data network, powerful processors, gamification, AI, augmented reality

Pandemic & Post-Pandemic

Social distancing, personal space, small group activity, leverage on digital platform, online and distance learning

Reproduction literacy/ content creation skills

Booming of social media

(Westera, 2010, Guardia et al, 2017; Gui, Fasoli & Carradore, 2017; Floridi, 2015; Burr & Floridi, 2020; Yusoff et al., 2020; Alexandra & Colleen, 2023)

FLEXNER, PROFESSIONALISM & DIGITAL ERA

Flexner's report 1910

Professionalism

e-Professionalism

"He was an educator, with strong feelings about teaching and, more importantly, about learning. He sympathized with medical students attending low-quality medical … In his opinion, standards were needed for the protection of the student as well as for the protection of the public."

"Professionalism in medicine requires the physician to serve the interests of the patient above his or herself interest. Professionalism aspires to altruism, accountability, excellence, duty, service, honor, integrity and respect for others."
(ABIM, 1995 – Project Professionalism 1992-1994)

"e-Professionalism (digital professionalism) as the attitudes and behaviors reflecting traditional professionalism paradigms but manifested through digital media."
(Cain & Romanelli, 2009)

| 1980 | 1990 | 2000 | 2010 | 2020 onwards |

Technical skills

needed to work with computer hardware and software

Mobile devices, video streaming, world-wide technology, wide band data network, powerful processors, gamification, AI, augmented reality

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Medical Professionalism Models

CanMEDS
(Frank, Snell & Sherbino, 2015)

Good Medical Practice
(GMC, 2013)

IRAN
(Aramesh, Mohebbi, Jessri & Sanagou, 2009)

TAIWAN
(Ho et al, 2011)

JAPAN
(Nishigori et al, 2014)

CHINA
(Jin, 2014)

ABIM
(ABIM, 1995)

4 Gates Model
(Al-Eraky et al, 2014)

ASEAN
(CALOHEA, 2023)

NORTH AMERICA
(Blackall et al, 2007)

Physician Charter
(Sox, 2002)

Arabian
(Al-Eraky et al, 2012)

MALAYSIA
(Roslan et al, 2017)

UGANDA
(Baingana et al, 2010)

SEA-CALOHEA MEDICAL COMPETENCY FRAMEWORK

1. Ethics
2. Humanities
3. Diversity

1. Personal care
2. Family care
3. Community care
4. Population care

1. Teamwork & leadership
2. Resilience
3. Self-Care
4. Professional values
5. Social & environmental accountability
6. Life-long learning skills
7. Communication skills

Ethics & Humanities

Professional Behaviour

Clinical Practice

Health & Wellbeing

Quality Practice

Integrated Medical Knowledge

1. History taking
2. Physical examination
3. Clinical reasoning
4. Clinical diagnosis
5. Clinical management
6. Patient safety

1. Critical and innovative thinking
2. Scientific and research skills
3. Evidence-based medicine
4. Digital skills
5. Financial skills for non-manager
6. Medico-legal in clinical practice

1. Basic medical sciences
2. Clinical medical sciences

(CALOHEA, 2021-2024, ERASMUS CAPACITY BUILDING PROJECT)

DOMAIN (SUBDOMAIN)	Knowledge that a medical graduate needs to acquire for them to perform the expected skills	Skills that a medical graduate must attain to perform the expected responsibilities	Ultimate expectation of a medical graduate as an individual and as a professional
	KNOWLEDGE	SKILLS	RESPONSIBILITY
HEALTH & WELLBEING (Personal, Family, Community & Population Care)	Demonstrate the understanding of health & wellbeing for a medical graduate to perform expected responsibilities as a junior doctor	Apply the health & wellbeing knowledge with appropriate skills, when performing expected responsibilities as a junior doctor	Perform expected responsibilities as a junior doctor with holistic care of health & wellbeing
PROFESSIONAL BEHAVIOUR (Teamwork & Leadership, Resilience, Self-care, Professional values, Social & environmental accountability, Life-long learning skills, Communication skills)	Demonstrate the understanding of professional behaviors for a medical graduate to perform expected responsibilities as a junior doctor	Demonstrate appropriate professional behaviors with appropriate skills when performing expected responsibilities as a junior doctor	Perform expected responsibilities as a junior doctor with the highest standard of professional behaviors
INTERGRATED MEDICAL KNOWLEGDE (Basic & Clinical Medical Sciences)	Demonstrate the understanding of basic & clinical medical sciences for a medical graduate to perform expected responsibilities as a junior doctor	Apply the medical knowledge with appropriate skills, when performing expected responsibilities as a junior doctor	Perform expected responsibilities as a junior doctor with sound basic & clinical medical sciences.
CLINICAL PRACTICE (History Taking, Clinical Reasoning, Clinical Diagnosis, Clinical Management, Patient Safety)	Demonstrate the understanding of clinical practices for a medical graduate to perform expected responsibilities as a junior doctor	Demonstrate appropriate clinical skills, when performing expected responsibilities as a junior doctor	Perform expected responsibilities as a junior doctor with the highest standard of clinical practices
QUALITY PRACTICE (Critical & innovative thinking, Scientific & research skills, Evidence-based medicine, Digital skills, Financial skills for non-manager, Medico-legal in clinical practice)	Demonstrate the understanding of quality practices for a medical graduate to perform expected responsibilities as a junior doctor	Demonstrate the quality practice with appropriate skills, when performing expected responsibilities as a junior doctor	Perform expected responsibilities as a junior doctor with the best quality practices
ETHICS & HUMANITIES (Ethics, Humanities, Diversity)	Demonstrate the understanding of ethics & humanities for a medical graduate to perform expected responsibilities as a junior doctor	Demonstrate ethics and humanities with appropriate skills, when performing expected responsibilities as a junior doctor	Perform expected responsibilities as a junior doctor with the highest standard of ethics & humanities

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1. TEAMWORK & LEADERSHIP			
2. RESILIENCE			
3. SELF-CARE		'	
4. PROFESSIONAL VALUES			
5. SOCIAL & ENVIRONMENTAL ACCOUNTABILITY			
6. LIFE-LONG LEARNING SKILLS			
7. COMMUNICATION SKILLS			'

DOMAIN (SUBDOMAIN)	Knowledge that a medical graduate needs to acquire for them to perform the expected skills	Skills that a medical graduate must attain to perform the expected responsibilities	Ultimate expectation of a medical graduate as an individual and as a professional
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1. TEAMWORK & LEADERSHIP	Demonstrate the understanding of the principles of effective leadership and teamwork in healthcare	Demonstrate effective leadership and collaboration within healthcare teams	Take initiative in coordinating patient care, supporting team members, and contributing to a positive team environment.
2. RESILIENCE	Demonstrate the understanding of the impact of stressors on personal well-being and professional performance	Demonstrate effective coping mechanisms and strategies for maintaining personal resilience.	Seek support when needed, learn from setbacks, and promote a culture of well-being
3. SELF-CARE	Demonstrate the understanding of the importance of self-care for maintaining personal and professional well-being.	Demonstrate effective self-care practices to prevent distress and burnout	Advocate for a healthy work-life balance and engage in activities that promote well-being
4. PROFESSIONAL VALUES	Demonstrate the understanding of core professional values, ethical principles, and guidelines	Demonstrate adherence to professional values in clinical practice	Uphold professional values in decision-making, interactions, and relationships
5. SOCIAL & ENVIRONMENTAL ACCOUNTABILITY	Demonstrate the understanding of the social determinants of health and the environmental impact of healthcare.	Demonstrate ability to contribute to social and environmental responsibility	Advocate for healthcare policies that address societal needs and minimize environmental impact
6. LIFE-LONG LEARNING SKILLS	Demonstrate the understanding of the importance of continuous learning and staying current in medical knowledge	Demonstrate the ability to access and critically appraise new medical information	Engage in ongoing professional development, seek feedback, and adapt to evolving healthcare practices
7. COMMUNICATION SKILLS	Demonstrate the understanding of the principles of effective communication in healthcare	Demonstrate clear and empathetic communication with patients, families, and colleagues	Actively listen, convey information clearly, and adapt communication to diverse audiences

The Usage of Social Media

Healthcare Consumers

43.3%

Medical Students

94.0%

Medical Residents

79.0%

Practicing Physicians

42.0%

(Guraya et al., 2021; Surani et al., 2017; Vikas & Amy, 2017)

RESEARCH ARTICLE

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Preserving professional identities, behaviors, and values in digital professionalism using social networking sites; a systematic review

Shaista Salman Guraya[1,2]*, Salman Yousuf Guraya[3] and Muhamad Saiful Bahri Yusoff[2]

Abstract

Background: Despite a rapid rise of use of social media in medical disciplines, uncertainty prevails among healthcare professionals for providing medical content on social media. There are also growing concerns about unprofessional behaviors and blurring of professional identities that are undermining digital professionalism. This review tapped the literature to determine the impact of social media on medical professionalism and how can professional identities and values be maintained in digital era.

Methods: We searched the databases of PubMed, ProQuest, ScienceDirect, Web of Science, and EBSCO host using (professionalism AND (professionalism OR (professional identity) OR (professional behaviors) OR (professional values) OR (professional ethics))) AND ((social media) AND ((social media) OR (social networking sites) OR Twitter OR Facebook)) AND (health professionals). The research questions were based on sample (health professionals), phenomenon of interest (digital professionalism), design, evaluation and research type. We screened initial yield of titles using pre-determined inclusion and exclusion criteria and selected a group of articles for qualitative analysis. We used the Biblioshiny® software package for the generation of popular concepts as clustered keywords.

Results: Our search yielded 44 articles with four leading themes; marked rise in the use of social media by healthcare professionals and students, negative impact of social media on digital professionalism, blurring of medical professional values, behaviors, and identity in the digital era, and limited evidence for teaching and assessing digital professionalism. A high occurrence of violation of patient privacy, professional integrity and cyberbullying were identified. Our search revealed a paucity of existing guidelines and policies for digital professionalism that can safeguard healthcare professionals, students and patients.

I. **A rapid rise in the usage of social media** by healthcare professionals and students.

II. **The impact of social media on medical professionalism**, there is a reciprocal increase in the prevalence of unprofessional behaviors in the digital era.

III. **Blurring of professional values, behaviors, and identity** in the digital era.

Impact of social media

Positive

Negative

Professional Growth & Education

Patient-Centered Care & Engagement

Professional Values & Behaviors

Professio nalism

Integrity challenges

Blurring boundaries

Behavioral & Psychological Consequences

(Guraya et al., 2021)

Review article

Digital professionalism on social media: A narrative review of the medical, nursing, and allied health education literature

Siobhan O'Connor [a,*], Mengying Zhang [b], Michelle Honey [c], Jung Jae Lee [d]

[a] School of Nursing and Midwifery, National University of Ireland Galway, Galway, Ireland
[b] School of Health in Social Science, The Edinburgh of University, Edinburgh, United Kingdom
[c] Faculty of Medical and Health Sciences, University of Auckland, Auckland, New Zealand
[d] School of Nursing, The University of Hong Kong, Hong Kong, Hong Kong

ARTICLE INFO

ABSTRACT

Background: Medical, nursing, and allied health students, and professionals are using online environments such as social media to communicate and share information. However, some have difficulty differentiating between their professional and personal roles and can behave inappropriately online. Better education and training may help prevent these issues from arising.
Objective: Identify and synthesise literature on educating healthcare students and practitioners about digital professionalism on social media.
Method: Four databases i.e., CINAHL, ERIC, MEDLINE and PubMed were searched using relevant terms. Five hundred and twenty-two articles were found and screened. Data extraction and critical appraisal were conducted. Analysis followed Braun and Clarke's six phases of thematic analysis.
Results: Eleven studies were included in the review. Digital professionalism was taught across medicine, nursing, and allied health education using a number of pedagogical approaches including traditional face-to-face teaching, as well as fully online, and blended methods. Its impact on learning centred on acquiring knowledge about communicating appropriately on social media which appeared to change how some students and practitioners behaved online, while improving confidence and information literacy. Developing and delivering education on digital professionalism tended to be affected by the amount of time faculty and trainers had to create curricula, organise and deliver teaching, and support students and clinicians. The design of the online platform seemed to be important as some had more functionality than others, allowing for greater interaction, which appeared to keep learners engaged.
Discussion and conclusion: This review provides the first synthesis of literature on educating the medical, nursing, and allied health professions on digital professionalism on social media. The results identify potential issues, knowledge gaps, and highlight implications for future educational interventions. Recommendations include setting clear boundaries and pedagogical instructions, understanding and applying privacy settings online, and utilising co-creation approaches with students and practitioners to improve the quality of health education.

I. **Learning about digital professionalism on social media** seemed to affect healthcare learners and practitioners in acquiring knowledge and refining behaviour and skills.

II. **The type of educational intervention** used to teach digital professionalism on social media varied.

III. **Learning outcomes of digital professionalism** on social media were assessed in several cases.

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Medical Education e-Professionalism (MEeP) framework; from conception to development

Shaista Salman Guraya [iD][a,b], Salman Y. Guraya[c], Denis W. Harkin[d], Áine Ryan[d], Mohd Zarawi bin Mat Nor[b] and Muhamad Saiful Bahri Yusoff[b]

[a]Royal College of Surgeons Ireland, Adliya, Kingdom of Bahrain; [b]Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia, Kubang Kerian, Malaysia; [c]Clinical Sciences Department, College of Medicine, University of Sharjah, Sharjah, UAE; [d]Faculty of Medicine and Health Sciences, Royal College of Surgeons in Ireland, Dublin, Ireland

ABSTRACT

Background: Medical professionalism education intends to produce virtuous and humanistic healthcare professionals who demonstrate perseverance and professional integrity. However, today's medicine has embodied a mammoth transformation of medical practice towards sns and the digital realm. Such paradigm shift has challenged the medical professional's values, behaviors, and identities, and the distinct boundaries between personal and professional lives are blurred. This study aims to develop a framework for healthcare professionals coping with the challenges of medical professionalism in the digital realm.

Methods: We followed a systematic approach for the development of a framework about e-professionalism. Qualitative data was collected from a systematic review and a delphi study, while quantitative data was collected by administering a validated questionnaire social networking sites for medical education (snsme). Subsequently, categorization of the selected data and identifying concepts, deconstruction and further categorizing concepts (philosophical triangulation), integration of concepts (theoretical triangulation), and synthesis and resynthesis of concepts were performed.

Results: The initial process yielded six overlapping concepts from personal, professional, character (implicit) and characteristic (explicit) domains: environment, behavior, competence, virtues, identity, and mission. Further integration of data was done for the development of the medical education e-professionalism (meep) framework with a central concept of a commitment to mission. The mission showed deep connections with values (conformity, beneficence, universalism, and integrity), behaviours (communication, self-awareness, tolerance, power), and identity (reflection, conscientiousness, self-directed, self-actualization). The data demonstrated that all medical professionals require updated expertise in sns participation.

Conclusion: The meep framework recognises a mission-based social contract by the medical community. This mission is largely driven by professional values, behaviors and identity. Adherence to digital standards, accountability, empathy, sensitivity, and commitment to society are essential elements of the meep framework.

Validating the Medical Education e-Professionalism Framework Using the Content Validity Index

Shaista Salman Guraya[1,2], Muhamad Saiful Bahri Yusoff[2], Mohd Zarawi Mat Nor[2], Salim Fredericks[1], Fiza Rashid-Doubell[1], Denis W Harkin[3], Salman Yousuf Guraya[4]

[1]School of Medicine, Royal College of Surgeons in Ireland (RCSI), Medical University of Bahrain, BAHRAIN

[2]Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, MALAYSIA

[3]Faculty of Medicine and Health Sciences, RCSI University of Medicine and Health Sciences Dublin, IRELAND
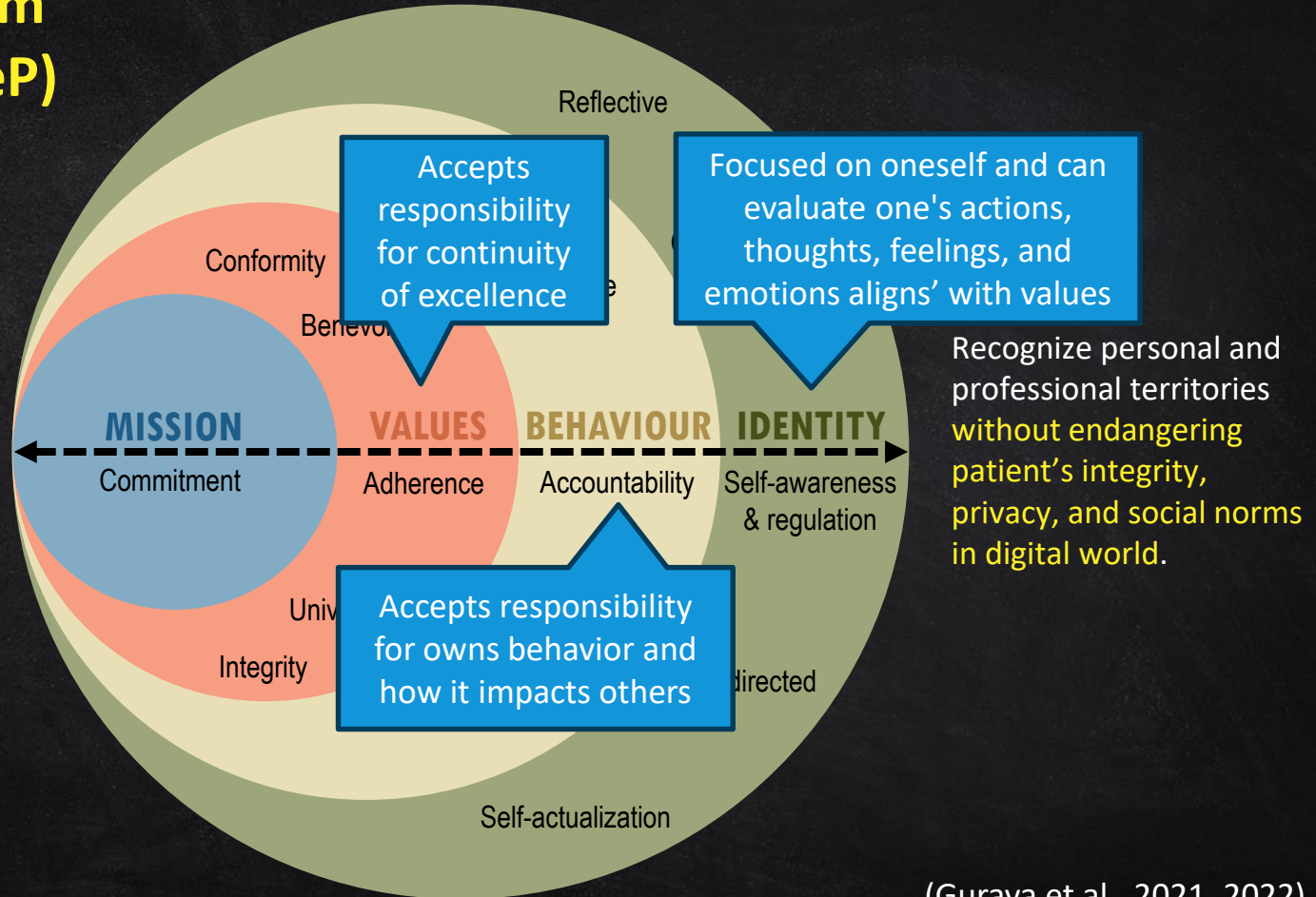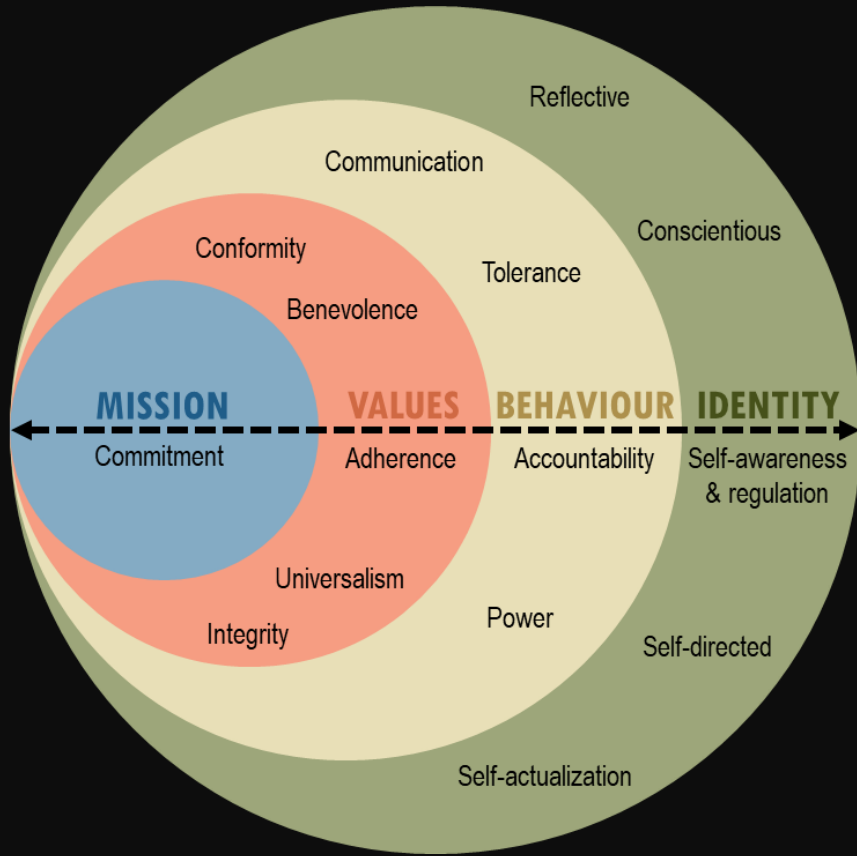
[4]College of Medicine, University of Sharjah, UAE

Medical Education e-Professionalism (MEeP) framework provides theoretical insights and serves as a conceptual framework to guide in the design of e-professionalism education.

e-Professionalism paradigms (MEeP)

MISSION:
a commitment by the medical profession to society through a social contract to deliver healthcare services with appropriate professional values, behaviors and identity.

Reflective

Conformity

Benevol...

Accepts responsibility for continuity of excellence

Focused on oneself and can evaluate one's actions, thoughts, feelings, and emotions aligns' with values

Recognize personal and professional territories without endangering patient's integrity, privacy, and social norms in digital world.

MISSION   **VALUES**   **BEHAVIOUR**   **IDENTITY**

Commitment   Adherence   Accountability   Self-awareness & regulation

Univ...

Integrity

Accepts responsibility for owns behavior and how it impacts others

...directed

Self-actualization

(Guraya et al., 2021, 2022)

e-Professionalism (MEeP)

In short, e-professionalism is the collective result of how a healthcare professional's mission, professional values, professional behaviors, and professional identity manifest in the digital world. It is a strategic alignment of these elements that ensures their online presence is not only informative and engaging but also ethical and trustworthy. This, in turn, fosters a positive and influential digital footprint that benefits both the professional and the wider healthcare community.

(Yusoff, 2023)
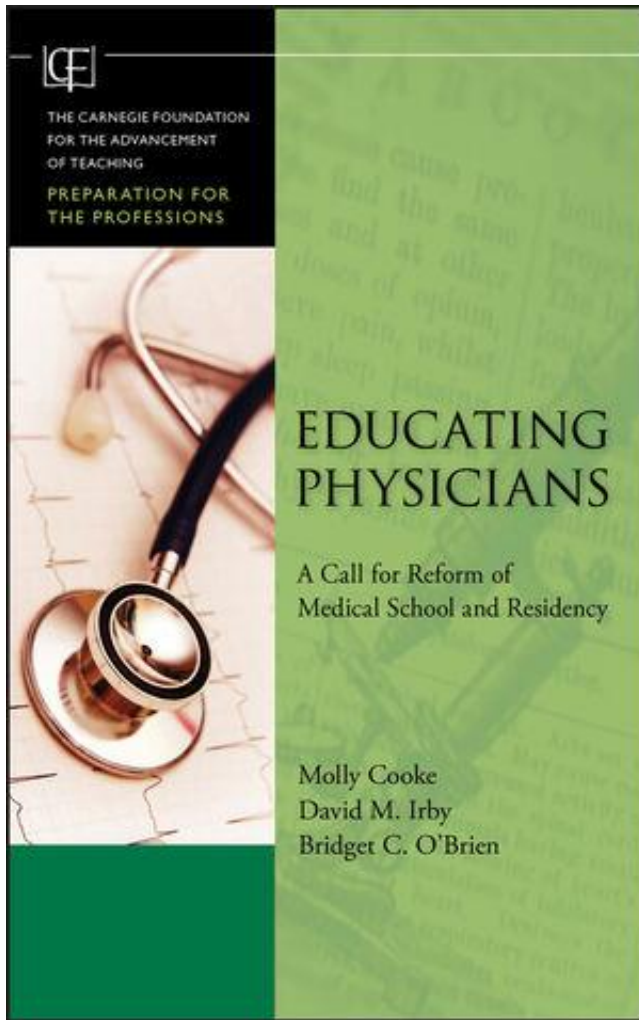
The Carnegie Foundation report on the future of medical education brought the issue to the forefront. Its authors stated that "**professional identity formation - the development of professional values, actions, and aspiration - should be the backbone of medical education**."

Cooke M, Irby DM, O'Brien C. Educating Physicians: A Call for Reform of Medical School and Residency. San Francisco, Calif: Jossey-Bass; 2010.
Richard L. Cruess, MD, Sylvia R. Cruess, MD, and Yvonne Steinert, PhD. Amending Miller's Pyramid to IncludeProfessional Identity Formation. Academic Medicine, Vol. 91, No. 2, 2016

THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT
OF TEACHING

PREPARATION FOR
THE PROFESSIONS

EDUCATING
PHYSICIANS

A Call for Reform of
Medical School and Residency

Molly Cooke
David M. Irby
Bridget C. O'Brien

Nurturing professionalism in medical schools. A systematic scoping review of training curricula between 1990–2019

Yun Ting Ong[a,b], Cheryl Shumin Kow[a,b], Yao Hao Teo[a,b], Lorraine Abdurrahman[a,b], Nicholas Wei Sheng Quek[a,b], Kishore Prakash[a,b], Clarissa Wei Shuen Cheong[a,b], Xiu Hui Tan[a,b], Wei Qiang Lim[a,b], Jiaxuan Wu[a,b], Laura Hui Shuen, Annelissa Chin[c], Ying Pin Toh[d], Stephen Mason[e] and Lalit Kumar Radha Krishna[a,b,e,f,g]

[a]Division of Supportive and Palliative Care, National Cancer Centre Singapore, Singapore, Singapore; [b]Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore; [c]Medical Library, National University of Singapore Libraries, National University of Singapore, Singapore, Singapore; [d]Family Medicine Residency, National University Health System, Singapore, Singapore; [e]Palliative Care Institute Liverpool, Academic Palliative and End of Life Care Centre, University of Liverpool, Liverpool, England; [f]Education Department, Duke-NUS Graduate Medical School, Singapore, Singapore; [g]Centre for Biomedical Ethics, National University of Singapore, Singapore, Singapore

"Nurturing professionalism must be focused upon **design of effective tools that consider professional identity formation**, concepts of personhood, the evolving context sensitive longitudinal nature of the process and the impact upon the learning environment." (pg. 645)

Amending Miller's Pyramid to Include Professional Identity Formation

Richard L. Cruess, MD, Sylvia R. Cruess, MD, and Yvonne Steinert, PhD

The Implications for Teaching

"It is self-evident that introducing the assessment of a new level of accomplishment in medical education **must be linked to changes in what is taught**." (pg. 184)

IS (Identity) — Consistently demonstrates the attitudes, values, and behaviors expected of one who has come to "think, act, and feel like a physician."

DOES (Action) — Consciously demonstrates the behaviors expected of a physician.

SHOWS HOW (Performance) — Demonstrates the behaviors expected of a physician under supervision.

KNOWS HOW (Competence) — Knows when individual behaviors are appropriate.

KNOWS (Knowledge) — Knows the behavioral norms expected of a physician.

The amended version of Miller's pyramid with the addition of "Is" and an outline of what is to be assessed at each level.

REVIEW ARTICLE

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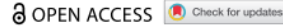
A scoping review on the relationship between mental wellbeing and medical professionalism

Kamran Sattar[a], Muhamad Saiful Bahri Yusoff [a], Wan Nor Arifin[b], Mohd Azhar Mohd Yasin[c] and Mohd Zarawi Mat Nor[a]

[a]Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia; [b]Biostatistics and Research Methodology Unit, School of Medical Sciences, Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia; [c]Department of Psychiatry, School of Medical Sciences, Universiti Sains Malaysia, Health Campus, Kubang Kerian, Kelantan, Malaysia

ABSTRACT

Background: Mental wellbeing issues among medical students are common, and their relationship to medical professionalism is debated. Few studies have attempted to link such issues with undergraduate medical education. This review aimed to advance the knowledge on this matter by exploring the relationship between mental wellbeing and medical professionalism in undergraduate medical education.
Methods: We collected the literature about mental wellbeing and medical professionalism (published from 1 January 1986 to 31 March 2021) from the Web of Science, PubMed, Scopus and ScienceDirect databases using the search terms 'mental wellbeing' and 'medical professionalism'. We included all peer-reviewed articles in which mental wellbeing and medical professionalism in the undergraduate medical education context were the central topics regardless of the age range, nationality, race and gender of the participants.
Results: From the 13,076 linitially found articles, 16 were included. These 16 articles were from nine countries in four different continents, which all together helped us find answer to our research question using extracted points relating to the main study themes (mental wellbeing and medical professionalism). Under theme 1 (mental wellbeing), six subthemes emerged: burnout, stress, depression, disappointment, depersonalisation and conscientiousness. Theme 2 (medical professionalism), on the other hand, had five subthemes: empathy, academic performance, compassion, unprofessional behaviour and professionalism. A significant inverse association was found between empathy and burnout. Academic performance was also related to burnout. At the same time, empathy was found to have a varied association with stress. Moreover, compassion was found to alleviate burnout and nurture professional gratification.
Conclusion: The medical professionalism attributes were found to deteriorate as the mental wellbeing issues grow. This can harm medical students' overall health, current learning abilities and future attitudes towards their patients. Explicit primary research is thus required to examine and intervene in the cause-effect relationship between medical professionalism and mental wellbeing.

"**The medical professionalism attributes were found to deteriorate as the mental wellbeing issues grow.** This can harm medical students' overall health, current learning abilities and future attitudes towards their patients."

Educators can improve the quality of professionalism education by **incorporating more theoretical insights and utilizing conceptual frameworks** as valuable guides in their design and implementation.

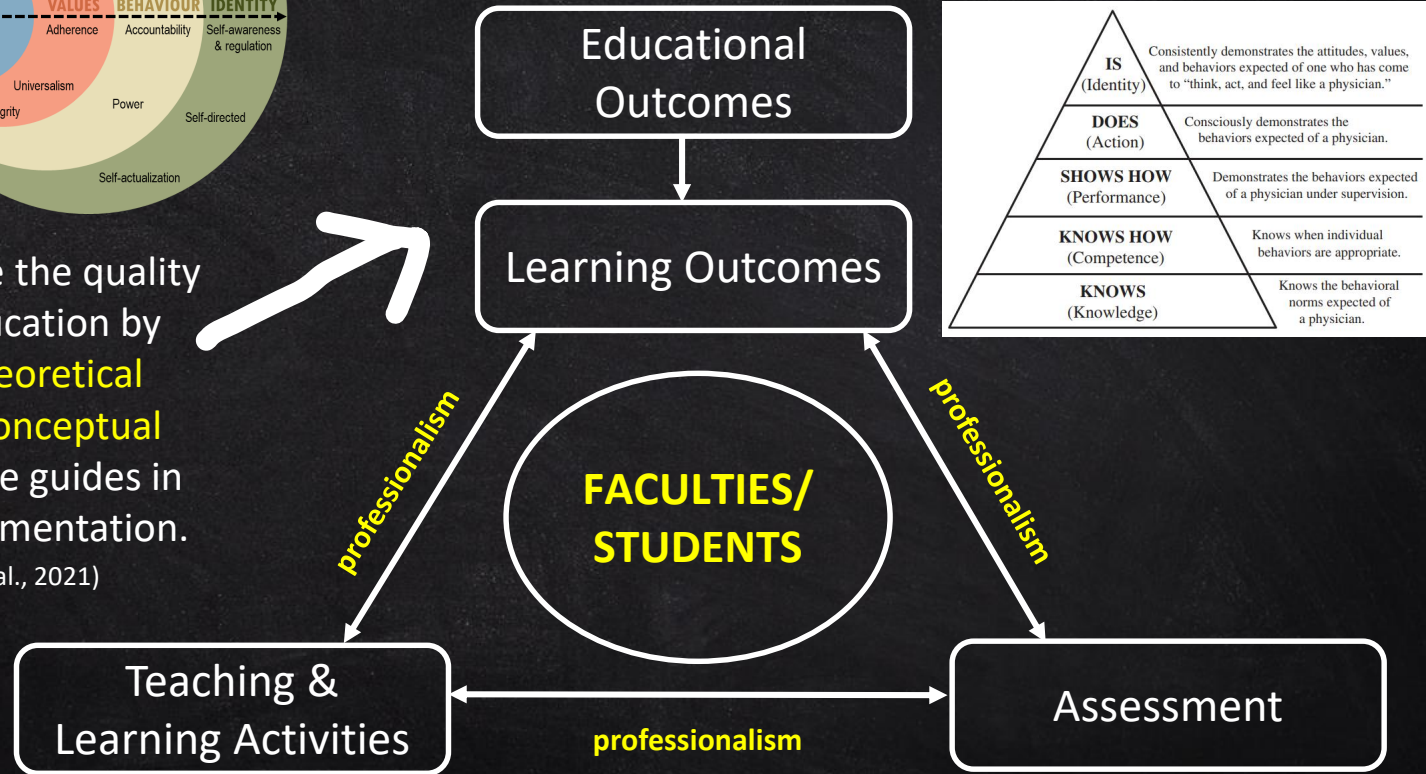(Guraya et al., 2021; O'Connor et al., 2021)
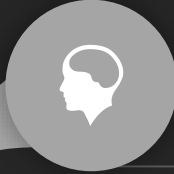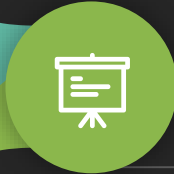
Professionalism Education
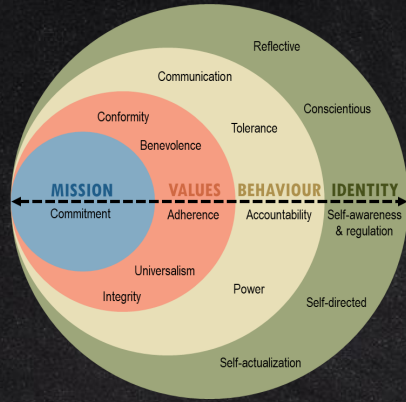
Educators can improve the quality of professionalism education by incorporating more theoretical insights and utilizing conceptual frameworks as valuable guides in their design and implementation.

(Guraya et al., 2021; O'Connor et al., 2021)

ACTIONABLE STRATEGIES TO NURTURE PROFESSIONALISM

01 Curriculum Design & Development

Assessment & Test Development 02

03 Teaching & Learning

Faculty Development 04

05 Technology-enhanced education

Quality Assurance 06

07 Use the existing professionalism models as guides
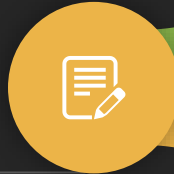
Informal Curricula

Intentional, structured, opportunistic, idiosyncratic, takes place between teachers and learners in non-clinical settings and interactions.

Wear and Skillicorn (2009)
Colardyn and Bjornavold (2004)
Livingstone (2001)

Formal Curricula

Genn (2001): "Actual course of study, the planned content, teaching evaluation methods, syllabi and other materials used in any education setting from lecture halls to labs to seminar rooms." Inclu. Formal policy statements, regulations, expectations and competencies for every educational cohort conceivable.

Role-Modeling   **Dialectic Methods**   **Didactic Methods**

Experiential Learning

Dialectic methods involve interactive and dynamic discussions where participants explore diverse viewpoints, engage in critical thinking, and actively contribute to the learning process.

Focused on Reflection

Wear and Skillicorn (2009): "the ideological and subliminal messages of both the formal and informal curricula. The hidden curriculum can be both human and structural; that is, it can be transmitted through human behaviours and through the structures and practices of institutions."

Hidden Curricula

Diagram illustrating training approaches in the teaching of professionalism
(Genn 2001; Livingstone 2001; Colardyn and Bjornavold 2004; Wear and Skillicorn 2009; Ong et al, 2020)
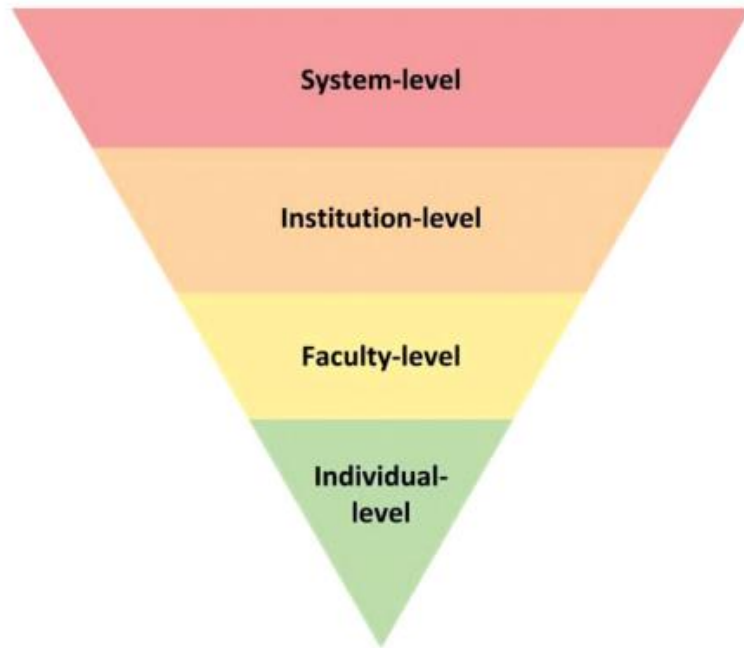
Figure 3. Different Levels of Barriers in Teaching Professionalism.

Table 4. Different levels of barriers in teaching professionalism.

Subtheme	Elaboration and examples
System-level	Informal curricula undermining formal curricula, such as if students observe unprofessional behaviour during a clinical posting.
Institution-level	Lack of consistent focus on professionalism training Lack of faculty development Lack of monetary or administrative support Difficulty of assessing professionalism objectively and fairly
Faculty-level	Lack of understanding of what professionalism is
Individual-level	Disinterest in professionalism training due to scepticism or conflicting commitments

Structured, Competency-based education
Longitudinal feedback and assessment with the use of Portfolios

Deepening professional traits

Portraying professionalism

Professionalism via communications

Professionalism role modelling

Contextualizing professionalism

Embracing a professional identity

Instilling Knowledge

Stage	Details
Stage 7: Reflective Practice	• Reflections, debriefs and feedback • Presence of feedback and holistic support
Stage 6: Exposure to Clinical Setting	• Interactions with patients and families • Assessed in clinical setting
Stage 5: Practice with Simulation	• Practicing professionalism • Develop interprofessional skills
Stage 4: Role modelling	• Positive role modeling • Knowledge of good professional conduct • Inculcate ability to discern between positive and negative role modeling
Stage 3: Small group discussions	• Contextualise the learning process
Stage 2: Case based discussion and formal events	• Reiterates professionalism's role in professional identity formation
Stage 1: Didactic programs	• Instil the knowledge about professionalism • Revolve around professional roles as medical students • Includes the honour code of the institution

Figure 4. Diagram showing the different stages proposed in Professionalism Training.

(Ong et al, 2020)

GMT 110: Medical Professionalism

2 credit unit

Coordinator:

Dr Nurhanis Syazni Roslan

(Dept of Medical Education)

nurhanis_syazni@usm.my

Describe the principles of medical professionalism

Apply medical professionalism principles in clinical cases.

Demonstrate medical professionalism in verbal and non-verbal communication

Explain clinical case from ethics and professionalism perspective.

PATIENT SAFETY
FOR MEDICAL STUDENTS

https://www.openlearning.com/courses/medical-ethics-for-beginners

Menu	
Introduction	
Module 1: Patient Safety Concept	›
Module 2: Patient Safety Goals	›
Reflection	
Formative Assessment	›
Evaluation	›
Gallery	
› Course Setup	
› Administer Students	
› Assessment	
› Certification	

Topic	Completed
▸ Topic 1: Medical Ethics	Completed: 1 of 1
▸ Topic 2: Medical Professionalism	Completed: 1 of 1
▸ Topic 3: Interprofessionalism	Completed: 1 of 1
▸ Topic 4: Communication Skills in Patient-Doctor Relationship	Completed: 3 of 3
▸ Topic 5: Patient Autonomy	Completed: 1 of 1
▸ Topic 6: Confidentiality	Completed: 1 of 1
▸ Topic 7: Patient Rights	Completed: 0 of 1
▸ Topic 8: Equity & Social Justice	Completed: 1 of 1
▸ Topic 9: Informed Consent	Completed: 0 of 0
▸ Topic 10: Patient Safety and Error	Completed: 0 of 0
▸ Topic 11: Evidence-based Medicine	Completed: 0 of 0
▸ Topic 12: Legal procedures, ethic, negligence	Completed: 0 of 0
▸ Topic 13: Etiquette and manner during clinical examination	Completed: 0 of 0
▸ Topic 14: Approach to good consultation (including dealing with errors)	Completed: 0 of 0
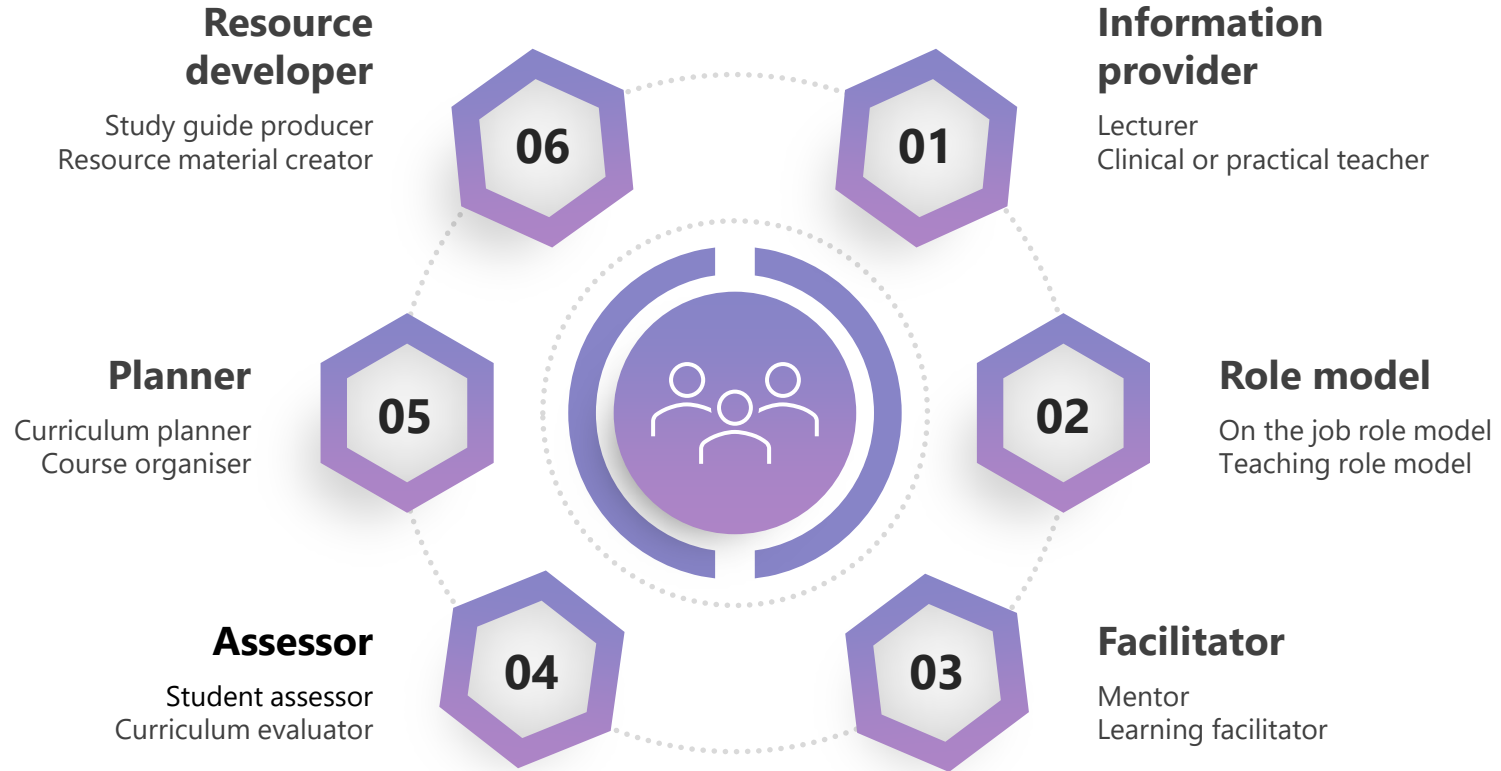
Online

The good teacher is more than a lecturer

Resource developer

Study guide producer
Resource material creator

06

Information provider

Lecturer
Clinical or practical teacher

01

Planner

Curriculum planner
Course organiser

05

Role model

On the job role model
Teaching role model

02

Assessor

Student assessor
Curriculum evaluator

04

Facilitator

Mentor
Learning facilitator

03

Harden RM, Crosby J. AMEE Guide No 20: The good teacher is more than a lecturer – the twelve roles of the teacher. Med Teach 2000; 22(4)334–347

From the students
- *More opportunity to receive feedback on professionalism*
- *More elaboration on how to improve professionalism with examples*

Where we want learners to be

GAP

Where they are

Where they are

Where they are
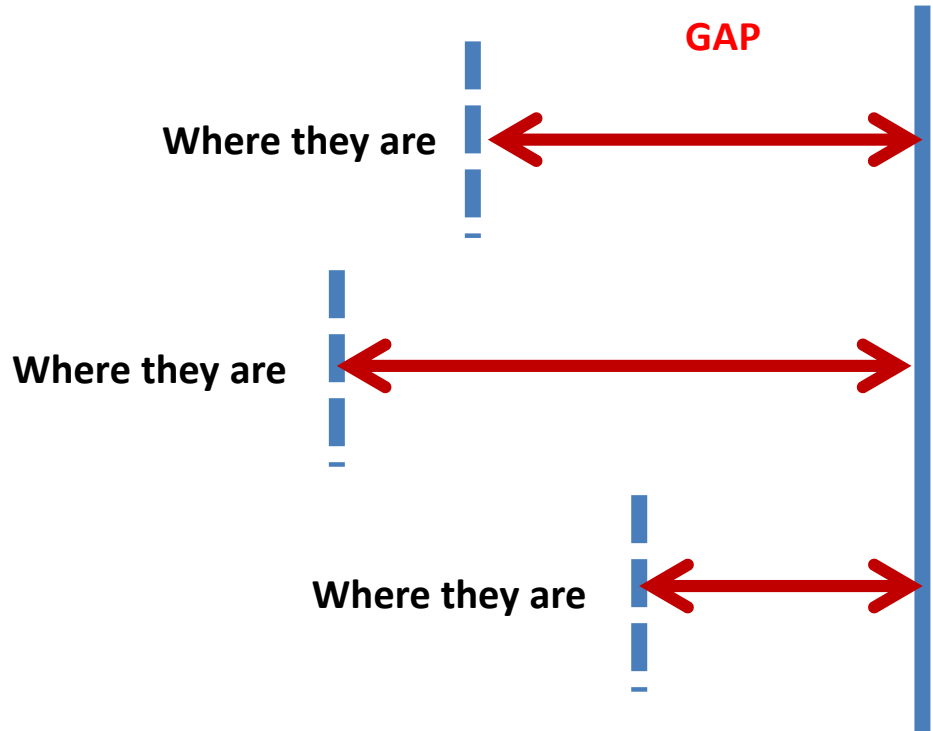
Feedback is closing the gap

information given on a learner's performance and the existing discrepancy between the actual and the desired state

Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, *77*(1), 81–112.

The online interventional workshop consisted of a 2-h structured program using Zoom

Changing Professional Behaviors in the Digital World Using the Medical Education e-Professionalism (MEeP) Framework—A Mixed Methods Multicentre Study

Shaista Salman Guraya [1,2*†], Muhamad Saiful Bahri Yusoff [2], Fiza Rashid-Doubell [1†], Denis W. Harkin [3], Suhail H. Al-Amad [4], Salim Fredericks [1], Mouhammad Omar O. Halabi [1], Natasya Abdullah [5], Hatem Moussa [6], Saad Imad Yousef Mallah [1], Jessica Atef Nassef Sefen [1], Heba Khalid A. Rahman Mohamed Ishaq AlKoheji [1], Manal Ebrahim Ali Althawadi [1], Lana Abdulsalam Alabbasi [1], Mohd Zarawi Mat Nor [2], Farida Reguig [6] and Salman Yousuf Guraya [7†]

[1] Royal College of Surgeons Ireland, Medical University of Bahrain, Busaiteen, Bahrain, [2] Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, Malaysia, [3] Faculty of Medicine and Health Sciences, Royal College of Surgeons Ireland, University of Medicine and Health Sciences, Dublin, Ireland, [4] College of Dental Medicine, University of Sharjah, Sharjah, United Arab Emirates, [5] Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, Nilai, Malaysia, [6] Department of Surgery, American Hospital Dubai, Dubai, United Arab Emirates, [7] Clinical Sciences Department, College of Medicine, University of Sharjah, Sharjah, United Arab Emirates

Background: There is increasing evidence on the exponential use of technology-based social media in medical field that has led to a proliferation of unprofessional behaviors in digital realm. Educating, training, and changing the behaviors of healthcare professionals are essential elements to restrain the rising unprofessional incidents. Therefore, this research was designed to determine the impact of an interventional workshop on the medical and dental students in improving their professional behaviors in the digital world using the newly developed medical Education e-Professionalism (MEeP) framework.

Methods: We adopted the Theory of Planned Behavior (TPB) as a benchmark reference which explores constructs intertwined with the mission-based MEeP framework; values (whistleblowing-raising concerns), behaviors (being responsible in the digital world) and identity (reflective practice in the digital world). A multicentre 3-phased mixed-method study was conducted using a pre-workshop survey, an online interventional workshop, and a post-workshop survey. SPSS and NVivo were the tools used for the data analysis.

Results: A total of 130 students registered for workshop out of which 120 completed the pre-workshop survey, 62 joined the workshop and 59 completed the workshop and post-workshop survey. From the *whistleblowing – raising concern* perspective, we found that attitudes and perceived behavioral control had a significant relationship. While for *responsible in digital world* category, attitude and perceived behavioral control had a significant bearing on the intentions. Third, for *reflective practice*, attitude and subjective norms significantly enhanced the intention of participants. A multi layered thematic analysis yielded four overarching themes of attitudes, subjective norms, perceived behavioral control and intentions. Most students showed positive *attitudes* of being

TABLE 1 | Mapping of competencies and constructs of the MEeP framework with eight case scenarios selected the framework evaluation.

No.	Case title	MEeP Framework competencies and constructs
1.	Free speech vs. professionalism	Benevolence (Values)
		Power (Behavior)
		Self-direction (Identity)
2.	The never forgiving digital world!	Communication (Behavior)
		Self-actualization (Identity)
		Reflective (Identity)
3.	A medical student on vacation	Benevolence (Values)
		Integrity (Values)
		Reflective (Identity)
4.	This platform is strictly professional!	Conscientious (Identity)
		Communication (Behavior)
		Self-direction (Identity)
5.	Is anything ever private?	Power (Behavior)
		Self-direction (Identity)
		Self-actualization (Identity)
6.	WhatsApp is a closed space!	Conscientious (Identity)
		Integrity (Values)
		Conformity (Values)
7.	Mr. Google's wise opinion	Benevolence (Values)
		Conscientious (Identity)
		Integrity (Values)
8.	Social media saved my son!	Conscientious (Identity)
		Power (Behavior)
		Universalism (Values)
		Integrity (Values)

I. The interventional workshop using MEeP framework improved attitudes, subjective norms, perceived behavioral control, and intentions to be digitally professional.

II. The participants' intentions to be digitally professional showed an improvement in professional value, behavior and identity constructs.

III. Participants showed a positive attitude by showing reflective, self-directed, and humane attributes.

IV. Conscientiousness, self-awareness and conformative aptitudes were shaped by subjective norms, while identity formation, controllability and self-efficacy values fell short of achieving self-actualization.

FIGURE 4 | The process of thematic analysis of the qualitative data which depicts relationship of subthemes and themes. All themes essentially lead to possible change in an individual's behavior.

Text boxes within figure:

How individuals feel about something, it's whether they like or dislike a specific behavior or action.

The degree of pressure felt from various aspects to act in a desired manner.

The individuals' commitment to perform a specific behavior in the future.

The individuals' belief in his/her ability to carry out a behavior

The study endorses a successful application of the mission based MEeP framework in enhancing the professional values, behaviors, and identities of undergraduate medical and dentals students.

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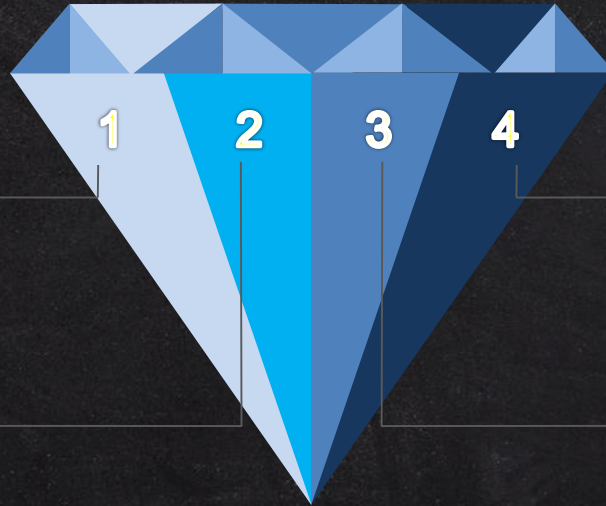
Medical Professionalism

"The means by which individual doctors fulfil the medical profession's contract with society" (Cohen, 2006)

Part 1 Summary

PROFESSIONALISM

Traditional & digital professionalism are important attributes

TECHNOLOGY

Technology enable professionalism education & growth

PROFESSIONALISM EDUCATION

Use existing professionalism models as guides to design professionalism education

ACTIONABLE STRATEGIES

Incorporate actionable strategies for cultivating a strong & authentic professionalism formation

Thank You

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https://www.researchgate.net/profile/Muhamad_Saiful_Bahri_Yusoff