PROFESSIONALISM TRAINING IN RESIDENCY PROGRAMS: CURRENT STATUS AND FUTURE GOALS

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HOW WOULD YOU DEFINE PROFESSIONALISM?
Professionalism includes various characteristics such as respect, ethics, etc. It is defined by standards of professional behavior and adherence to specific rules and values. The concept of professionalism is central to the practice of healthcare and involves qualities such as dependability, honesty, and integrity.
IS THERE A FORMAL DEFINITION FOR PROFESSIONALISM?

- Societal construct
- Variable and constantly changing
- Defined by the professionals themselves
Programs should be mindful of the six core competencies specified by the American Board of Medical Specialties (ABMS) and the Accreditation Council for Graduate Medical Education (ACGME), and make efforts to integrate these competencies in their curricula and evaluation process. These competencies include: (1) patient care and procedural skills, (2) medical physics knowledge, (3) practice-based learning and improvement, (4) interpersonal and communication skills, (5) professionalism, and (6) systems-based practice. These competencies may be evaluated in medical physics resident education. Reference: Prisciandaro, Joann I., et al. "Essentials and guidelines for clinical medical physics residency training programs: executive summary of AAPM Report Number 249." Journal of applied clinical medical physics 15.3 (2014): 4-13.
AAPM REPORT 249

Professionalism. Medical physics residents should carry out all assigned duties, adhere to ethical principles, and show sensitivity to a diverse patient population. Residents shall develop professionalism by:

a. demonstrating a commitment to carrying out responsibilities;
b. understanding professional issues and participating in the activities of professional societies;
c. showing leadership and adhering to ethical principles;
d. demonstrating sensitivity to diverse patient populations;
e. being responsive to the needs of patients and prioritizing those needs over self-interest;
f. respecting patient privacy and confidentiality; and g. demonstrating a commitment to excellence and ongoing professional development.

ACGME and ABS provide more detailed description of what characteristics make a professional

8.6 Ethics and Professionalism Curriculum

These standards shall be fully addressed before completion of the resident educational programs. Indicate how the following topics are covered:

**Professionalism**
- Definition of a profession and professionalism
- Elements of a profession
- Definition of a professional
- Elements of professionalism (altruism, honesty, integrity, excellence, duty, accountability, respect for others)
- How is professionalism judged?
- Do’s and don’t’s of professionalism
- Physician’s charter and applicability to physicists

**Leadership**
...

**Ethics**
...

Reference: https://www.campep.org/ResidencyStandards.pdf
Professionalism and Ethics Content Guide

Professionalism and Ethics content is included in the following ABR Medical Physics Exams:

- Part 1 – General
- Part 2
- Part 3 – Oral

The topics covered include but are not limited to:

- Ethical principles
- Historical perspective
- Ethical encounters or dilemmas
- Basic ethical values
- Relationships
- Clinical conflicts
- Continuing education
- Public responsibility
- Employer/employee relationships
- Conflict of interest
- Human research principles
- Scientific principles
- Scientific misconduct
- Publication practices
- Animal research
- Teacher education ethical issues
- Student education ethical issues

These topics are very similar to the material presented in:

- AAPM TG 159 "Recommended ethics curriculum for medical physics graduate and residency programs"
- AAPM Report TG 249 "Essentials and Guidelines for Clinical Medical Physics Residency Training Programs"
- ABR/ACR/RSNA/AAPM/ASTRO/ARR/ARS Online Modules on Ethics and Professionalism.

http://www.aapm.org/education/onlinemodules.asp
- **Medical Physicists**
  - professional and respectful
- **Physicians**
  - provide accurate, up-to-date information
- **Regulatory Agencies**
  - assist and cooperate with regulators in an honest and respectful manner
  - fully comply with regulatory requirements
- **Patients**
  - provide services in such a way that maximum benefit to the patient
  - must not offer medical advice
- **Public**
  - provide expert information
  - should base statements on scientific principles and fact
  - maintain standards of privacy and confidentiality.

Support for continuing education in ethics/professionalism was above 90% (1271/1384), and about half of respondents preferred such education to be mandatory and half voluntary. Support for continuing education was stronger among women (95%, 313/328 vs 91%, 923/1016 for men; P < 0.05). 75% (1043/1386) of the respondents expressed interest in attending ethics/professionalism sessions held during professional/scientific meetings. 91% (1254/1385) of the respondents considered themselves moderately-to-very competent to address ethical/professional dilemmas in their current positions.

DOES YOUR RESIDENCY PROGRAM HAVE A FORMAL ROTATION FOR TRAINING PROFESSIONALISM SKILLS?
Depends on perception of the definition of what professionalism includes

Leadership skills?
Emotional intelligence?
What’s included in soft skills?

AAPM Online Ethics & Professionalism Training Modules (RSNA)

Likely most common approach
How do you evaluate that these skills translate after completing the modules?
How to remediate if skills are lacking?

Master-Apprentice model

Lead by example is another common approach
May not be failing, but still leaves room for improvement
Something more quantifiable, more standardized approach (what we like as scientists!!)
The term ‘professionalism’ has been used in different ways. Professionalism has been defined as exhibiting beliefs, principles, and attitudes that serve the best interests of patients above practitioners’ personal interests [23]. Professionalism, in general, can be defined as being useful to the community, acquiring autonomy to allow the individual to make professional judgments without outside help from others, having a sense of responsibility, and performing one’s duty regardless of external rewards. Providing a definition of pharmacy professionalism involves, therefore, a complete clarification of the distinct role of pharmacists, rather than just providing a list of professional components [11]. Professionalism can also be described as behaviour or value aims that distinguishes a profession [13].

Debated concepts and interpretations have evolved over time [24] and, while the definitions discussed above grasp the core of professionalism and share many of the elements of professional practice, the actual elements are mostly descriptive, relatively wide-ranging, and imprecise. As the American College of Clinical

“The professionalism is a complex concept that is challenging to measure because it has no standardized definition and the existing literature related to the topic is limited.”

"Professionalism is an active, multi-domain concept."

**Fig. 3.** The bicycle wheel model of professionalism.

**Fig. 2.** The umbrella model of professionalism.

Instruments used to assess professionalism:
- Behavioral Professionalism Assessment Instrument (BPAI)
- Lerkiatbundit’s instrument
- Pharmacy Professionalism Instrument (PPI)
- Professionalism Assessment Tool (PAT)

Assessment method in all focused on self-administered surveys with rating scales.

Two measured professional behaviors and two explored the measurement of professionalism attitudes.

All built directly on the 6 domains of professionalism proposed by the American Board of Internal Medicine (ABIM).
Instruments used to assess professionalism:

- Behavioral Professionalism Assessment Instrument (BPAI)
  - 25-item survey instrument measuring professional behavioral aspects of pharmacy students’ competence during postgraduate training.
  - 4 factors: responsibility, interpersonal relations/social skills, communication skills, and appearance
  - Students were invited to evaluate their behaviors, and teachers were invited to rate their student’s professional behaviors based on what they observed during the course.

- Lerkiatbundit’s instrument
  - Survey that measured changes in the professional attitudes of students across different curricula and classes in a single school of pharmacy
  - 6 factors of professionalism: professional commitment, professional organization, autonomy, public service, self-regulation, and continuing education.

- Pharmacy Professionalism Instrument (PPI)
  - Survey instrument measured professionalism among first-year students and new pharmacy graduates during their postgraduate training.
  - Main purpose of this study was to create and validate an instrument to assess the attitudinal features of professionalism
  - 6 characteristics of professionalism from the ABIM, namely: excellence, respect for others, altruism, duty, accountability, and honesty/integrity

- Professionalism Assessment Tool (PAT)
  - 5-point instrument using the 5 performance levels: “knows, knows how, shows, shows how, does, is”
  - 33-item PAT included 5 domains: (1) upholding principles of integrity and respect; (2) relationships with others; (3) reliability, responsibility, and accountability; (4) citizenship and professional engagement; and (5) lifelong learning and adaptability

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ABSTRACT

Introduction: Professionalism is an evolving, socioculturally informed multidimensional construct that influences doctor-patient relationships, patient satisfaction and care outcomes. However, despite its clinical significance there is little consistency in how professionalism is nurtured amongst medical students. To address this gap a systematic scoping review of nurturing professionalism in medical schools, is proposed.

Methods: Levac’s framework and the PRISMA-P 2015 checklist underpinned a 6-stage systematic review protocol. Concurrent use of Braun and Clarke’s approach to thematic analysis and directed content analysis was used to identify the key elements in nurturing professionalism.

Results: 13921 abstracts were identified from six databases, 854 full-text articles reviewed, and 162 full-text included articles were included. The 4 themes identified through thematic analysis are consistent with findings of the directed content analysis. These were the definition of professionalism, the approaches, content, barriers and enablers to teaching professionalism.

Conclusion: Informed by a viable definition of professionalism and clear milestones nurturing professionalism nurturing professionalism begins with culturally appropriate training in clinical competence, humanistic qualities and reflective capacity. This process requires effective evaluations of professional identity formation, and the impact of the learning environment underlining the need for longitudinal assessments of the training process.
**BARRIERS**

- **System-level**
  - Informal curricula undermining formal curricula

- **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 skepticism or conflicting commitments

**ENABLERS**

- **Active student involvement**
  
- **Motivating students to learn about professionalism**
  - enhancing self-directed learning and propagating interest in professionalism training

- **A platform to discuss discrepancies in what they learn and observe**
  - This builds trust between faculty and students to allow for open communication and subsequent remediation if needed

- **Support from institutions and faculty is vital**

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"Nurturing professionalism needs to be horizontally and vertically integrated."

- **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

- **Debrief**
- **Live patient with assessment**
- **Role Play with assessment**
- **Resident Observation of Faculty**
- **MP RO Resident Discussion**
- **Present Brachy T&O Case**
- **AAPM/RSNA Modules**
Effective teaching and assessment models

Resources and support for implementation

Train the trainer
FUTURE GOALS: RESOURCES AND SUPPORT
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