



AFMDC Competencies and outcomes for Medical Graduate

The Competencies of medical graduate of Aziz Fatimah Medical and Dental college are outlined in accordance to the Seven Star doctor as outlined by PM&DC and is developed in alignment with Mission and Vision.

1. Skillful
2. Knowledgeable
3. Critical thinker
4. Community health promoter
5. Professional and ethical
6. Life long Learner
7. Researcher

Following are the detailed outcomes from each of the above mentioned competencies.

I. Knowledgeable:

This embodies knowledge of basic medical and clinical sciences required for the practice of medicine. The AFMDC medical graduate should be able to:

a) Differentiate between

normal and abnormal structure and functions of the body; in order to recognize and identify abnormalities in body structure in context of different diseases;

normal and abnormal molecular, cellular, biochemical, and physiological and pathophysiological mechanisms and processes (physical and mental) that maintain and derange the body's homeostasis, in health and disease;

normal and abnormal human behavior, and relate the abnormality

to its psycho-pathological and pathophysiological basis;
biological and social determinants and risk factors of disease,
various etiological cause(s) and causative agents for specific
injuries, illnesses and diseases;
available therapeutic options to select the most appropriate
treatment modality or drug(s) for common diseases based on
pharmaco-dynamics and/or efficacy;

b) Relate

the effects and interactions of physical, emotional and social
environments to health and disease of humans;

the natural history of acute and chronic, communicable and non-
communicable diseases with respective etiologic agents and
effect of appropriate interventions on the progress of disease;

c) Apply

evidence-based medicine concepts to provide best possible cost-
effective care;

d) Ensure

compliance with the legal system as it impacts health care and
the PM&DC regulations;

patient safety and infection control in their clinical practise.

II. Skillful:

Competent medical graduates of AFMDC require sound clinical
skills grounded in knowledge and skills in patient-centered care.
They should be able to demonstrate to:

a) Take a focused history and identify the patient's risk factors with
appreciation of the bio-psycho-social model.

b) Perform physical and mental state examination(s) in order to
identify specific problems and differentiate from others, and identify
non-conformity to anatomical or physiological configurations;

c) Formulate a provisional diagnosis with justification, and two to
three likely differential diagnoses;

d) Order appropriate investigations with the consent of the patient,
and interpret their reports to either confirm the diagnosis or
differentiate from others;

e) Perform procedures with the consent of the patient, ensuring

infection control in giving injections (I/M, I/V, S/C, I/D), managing infusion lines and blood transfusion; providing first aid, basic life support (including cardiopulmonary resuscitation), nebulisers, wound care and dressings; monitoring oxygen saturation and oxygen therapy; taking swabs and Pap smears; recording ECG; performing peak flow spirometry, glucometer blood sugar testing , urinary catheterization, dipstick urinalysis, and simple skin suturing;

- g) **Critique** the advantages, disadvantages, indications, contra-indications, limitations and complications of the current treatment modalities, justifying the use of each by best available evidence;
- h) **Formulate management plans** in partnership with patients ensuring their safety by:
 - i) **Diagnosing and managing common health problem** independently;
 - j) **Using cost-effective best evidence patient-safe approaches**, reporting adverse drug reactions and drug interactions;
 - k) **Recognizing alternate medicine is an option** with its own effect on health;
 - l) **Incorporating patients' concerns, expectations & understanding**, determining the extent to which the patients wish to be involved in decision-making, and respecting the decisions and rights of the patients;
 - m) **Recognizing, stabilizing (first aid and basic life support), investigating and managing as necessary** *transporting* patients in emergency situations, *referring* others appropriately (triage); recognizing and report *abuse and neglect*;
 - n) **Being readily accessible** when on duty;
 - o) **Alleviating pain and distress**, including end-of-life care;
 - p) **Recognizing and working within the limits of own competence**, making use of available resources, and taking advice from colleagues where appropriate, following the consultation process.
 - q) **Advise and counsel** the patient and their family members for appropriate health promotion, rehabilitation and support; prevention of risk factors for family members including genetic counseling; immediate treatment and medications, complication and prognosis,

using simple terms and layman"s language;

- r) **Educate** the patient regarding the health problem, available choices, management plan, self-care, and use of prescribed drugs and equipment, such as inhalers;
- s) **Recognize and take into consideration issues of equality, equity and diversity**, and that opportunities are missed if not perceived to be useful by others;
- t) **Describe and debate the reasons for the success or failures of various approaches** to increase prevention and to decrease social inequities;
- u) **Manage time and prioritise tasks** and use of resources;
- v) **Ensure patient safety** always including strict infection control practices.

III. Critical thinker :

The ability to critically evaluate existing knowledge, technology and information, and to be able to reflect on it, is necessary for solving problems. AFMDC medical graduates should be able to demonstrate:

- a) **Use of information** obtained and correlated from different sources;
Critical data evaluation (interpret, analyse, synthesize, evaluate to form decisions);
 - b) **Dealing effectively with complexity, uncertainty** and probability in medical decision-making, reflecting on the latest evidence and its application to the health problem;
 - c) **Regular reflection on their own practice** and on standards of medical practice;
 - d) **Initiating, participating in or adapting to change as required**, to ensure that the profession and the patients both benefit;
 - e) **Flexibility and a problem-solving approach**;
- Commitment to quality assurance** and monitoring by participating in chart audits and reporting critical incidents to improve medical practice and decrease risk to self, patients and the public;

- f) **Raising concerns about public risk and patient safety.**

IV. Community Health Promoter:

To deal with problems of population-based primary health care, including health promotion and disease prevention with special emphasis on vulnerable populations, medical and dental graduates require knowledge of population health and health systems.

Medical graduates should understand their role and be able to take appropriate action for protecting and promoting health of populations.

They should be able to

- a) **Relate effects** of life-styles and genetic, demographic, environmental, social, cultural economic, psychological and determinants of health and illness on populations;
- b) Take appropriate action for **infectious, non-communicable disease and injury prevention**, and in protecting, maintaining and promoting the health of individuals, families and community;
- c) **Evaluate national and global trends in morbidity and mortality** of diseases and injuries of social significance, the impact of migration, environmental factors on health and the role of national and international health organizations on health status;
- d) **Work as an effective member of the health care team** and demonstrate acceptance of the roles and responsibilities of other health and health related personnel in providing health care to individuals, populations and communities;
- e) **Adopt a multidisciplinary approach for health promoting interventions** which require shared responsibility and partnerships of the health care professions with the population served as well as inter-sectoral collaboration.
- f) **Apply the basics of health systems including policies**, organizations, financing, cost-containment measures of rising health care costs, and principles of effective management to the care of populations, families and individuals;
- g) Promote and implement mechanisms that **support equity** in access to health care, effectiveness, and quality of care;
- h) **Make decisions for health care using demography, biostatistics and epidemiology** as well as national, regional and local

surveillance data.

V. Professional and Ethical:

- a). Medical and dental graduates should be able to demonstrate professional values of self and professional accountability, honesty, probity, and ethics **without discrimination** on the basis of age, gender, religion or beliefs, colour, race, ethnic or national origin, culture, disability, disease, lifestyle, marital or parental status, sexual orientation and social or economic status;
- b) Strive for **constant improvement** of self & health delivery systems;
- c) **Respect the views & interests of the patient and patient's family;**
- d) **Uphold principles** of patient autonomy, beneficence, non-maleficence, and distributive justice; confidentiality, informed consent and ethics;
- e) **Use moral reasoning in decision-making** in dealing with conflicts within and between ethical, legal and professional issues including those raised by economic constraints, commercialization of health care, and scientific advances; and
- f) **Being accountable for regulation of self and the profession**, through audits and performance reviews, in setting up one's own practice and in dealing with pharmaceutical and other commercial enterprises.

VI. Lifelong learner

Medical graduates must continually acquire new scientific knowledge and skills to maintain competence, and incorporate it into their day-to-day medical practice. For life-long learning, they should demonstrate a desire for continuing medical education during professional life through personal development activities to continuously acquire and use new knowledge and technologies. Medical and dental graduates should be able to:

- a) **Demonstrate continuous learning** based on regular self-assessment seeking peer feed-back. This also includes a continuous undertaking of self-directed study and credited continuous medical education activities up to re-licensure and re-certification;

- b) **Manage information effectively** in order to use it for efficient and effective self-learning, medical problem solving and decision-making;
- c) **accurately document** and maintaining records of their own practice for better patient care and for analysis and improvement;
- d) **retrieve patient-specific information** from a clinical data system; using information and communication technology based on its value and limitations;
- e) **search, collect, organize and interpret** health and biomedical information from credible databases and sources;
- f) **match patient information to evidence available in literature** to form judgments for diagnostic, therapeutic, preventive or prognostic decisions and for surveillance and monitoring of health status.
- g) **Provide evidence of continuing career advancement** by pursuing further training in specific fields or continuing professional development by attending CPD programmes in their primary discipline or as a professional. This evidence may be collated by maintaining professional development portfolios;
- h) **Function effectively as a mentor and a teacher with training**, in order to appraise, assess, teach, and provide feedback to themselves, peers, colleagues and students;
- i) **Respond positively to appraisals and feedback.**

VII.Researcher:

Medical and dental graduates are expected to demonstrate constructive criticism, a spirit of enquiry, creativity and a research-oriented attitude. They graduates should be able to:

- a). Identify a researchable problem and critically review literature;
- b). Phrase succinct research questions
- c). Formulate hypotheses
- d). Identify the appropriate research design(s) in Epidemiology and analytical tests in Biostatistics to answer the research question;
- e). Collect, analyze and evaluate data, and present results where possible;
- f). Demonstrate ethics in conducting research and in ownership of intellectual property.

