

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



**Rawalpindi Medical University
Integrated Bioethics Curriculum –
First–Final year MBBS
2022**



**Rawalpindi Medical University
Main Campus Tipu Road
Rawalpindi**

Message from Vice Chancellor Rawalpindi Medical University



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As a Vice Chancellor of Rawalpindi Medical University it gives me immense pleasure to enlighten that Rawalpindi Medical University is one of leading public sector institution in academic excellence, research and innovation. Rawalpindi medical university has taken initiative of development of Bioethics curricula for undergraduate medical students in order to harmonize with latest advancement in medical education around the globe. As a Vice Chancellor of Rawalpindi Medical University this is moment of real pride for me that dedicated team of faculty of the Rawalpindi Medical University is working hard to uplift this newly formed public sector medical institution for academic excellence, research , innovation and ethical practice . The hard work of devoted team of competent professionals has enabled university to successfully implement Bioethics curricula across five years of undergraduate medical education. Rawalpindi Medical University has taken this initiative to improve healthcare service delivery and to build the capacity of future healthcare providers, hence missing link of sound ethical practice in generation of new medical knowledge and evidence based practices could be played by the talented section of medical community of this region.

Professor Dr. Muhammad Umar
(Sitara-imitiaz Pakistan)

Vice Chancellor
Rawalpindi Medical University

Mission of Rawalpindi Medical University



To improve the standards of medical education of proficient professional quality with the aim of preparing healthcare professionals for practice of evidence based, patient centered medicine and community based preventive care



To advance healthcare through forward looking health research leading to improved scientific knowledge and better human service



To inculcate values of mutual respect and ethical practice of medicine

Development of Integrated undergraduate Bioethics Curricula at Rawalpindi Medical University

Introduction and Background

Evidence has supported that teachings of Bioethics and professionalism should be incorporated in undergraduate medical curriculum as the longitudinal theme (World Federation for Medical Education, WFME. 2007). The accreditation councils, regulatory, licensing bodies and medical associations (GMC 2015, CanMEDS2015, Accreditation Council for Graduate Medical Education, ACGME, 2006) all over the world have emphasized the teachings of ethics, professionalism and communication skills at undergraduate level. The Accreditation Council for Graduate Medical Education (ACGME) through its "Outcomes Project" (Accreditation Council for Graduate Medical Education ACGME, 2006) has highlighted professionalism and ethical practice as one of the six competencies required of a graduating medical doctor. The ACGME's definition includes list of attributes for graduating medical student which include ethics, altruism, commitment to excellence accountability, compassion, integrity, responsiveness, respect and sensitivity to diversity (ACGME Outcome Project. General competencies,2007). American Board of Internal Medicine Foundation (ABIM), the American College of Physicians Foundation, and the European Federation of Internal Medicine organized the Professionalism Charter Project (ABIM Foundation and ACP-ASIM Foundation European Federation of Internal Med 2002). The "Physician Charter," list three "fundamental principles" and ten "professional responsibilities" that characterize professionalism

*The three fundamental principles of the "Physician Charter," are the **primacy of patient welfare, patient autonomy and social justice and ten** "Professional Responsibilities" of medical professional include Commitment to professional competence, Commitment to honesty with patients, Commitment to patient confidentiality. Commitment to maintaining appropriate relations with patients. Commitment to improving 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 (ABIM Foundation and ACP-ASIM Foundation European Federation of Internal Med 2002).*

The World Federation of Medical Education (WFME, 2015) has highlighted that medical students graduating until 2023 must have undergone through modern teaching-learning stratagem including Bioethics, Social Accountability and Community Based Education as a

mandatory component. The emphasis is on the integration of clinical and basic sciences with incorporation of professionalism, bioethics, interpersonal and communication skills as longitudinal theme in undergraduate medical curricula.

Keeping in view the global trends adopted by the modern curricula to formally integrate the elements of professionalism and Bioethics, Pakistan Medical & Dental Council (PMDC, 2015) now Pakistan Medical Commission (PMC) has also made it mandatory for all medical schools to incorporate professionalism into their curricula to produce community oriented and compassionate doctors who are able to respond to pressing health issues of communities, nations and regions they have the mandate to serve. PMC has prescribed outcomes and desired competencies to produce community oriented and companionate doctors who are able to respond to pressing health issues of communities, nation and region they have the mandate to serve. PMC has also highlighted seven competencies required of a graduating medical doctor including care provider, decision-maker, communicator, community leader, manager and researcher. In its first Code of Ethics for healthcare professionals, formulated in 2002, the Pakistan Medical and Dental Council (PMDC) stated that medical and dental colleges, College of Physicians and Surgeons, and universities running postgraduate medical courses “are advised to incorporate medical ethics in their curriculum.” In reality, currently only a handful of medical and dental colleges include any bioethics education as part of their curriculum for students. To address this deficiency, Health Care Ethics Committee (HCEC) of the National Bioethics Committee (NBC) Pakistan, worked to develop this comprehensive document, “Guidelines and Teachers Handbook for Introducing Bioethics to Medical and Dental Students.”

Even these directives by the national regulatory bodies have failed to introduce the elements of teaching, learning and assessment of bioethics curriculum in Pakistani medical schools, there is no mechanism to assess this competency at any level. This deficiency clearly highlights the missing link in constructive alignment and stresses urgent incorporation of professionalism in medical education (Butt and Khan, 2015).

Keeping in consideration the current trends of curricular reforms globally and nationally, team of dedicated professionals of Rawalpindi Medical University, took an initiative of revamping existing curricula under visionary leadership of worthy Vice Chancellor with aim of spiral integration of bioethics, professionalism, inter personal and communication skills as longitudinal theme spanning across all five years with constructive alignment of teaching, learning and assessment strategies accordingly .

The aim of integration of basic, clinical and humanistic approach is to develop the holistic paradigm in which disease process is determined in socio cultural, geographical and contextual perspective. The concept of population health including disease prevention and health promotion is the basis of a paradigm shift in traditional medical education. The aim of incorporation of Bioethics as a longitudinal theme is to produce competent future physicians not just having sound scientific knowledge but also having sensitization to community needs and ability to providing best services to underserved communities in ever changing arena. The main goal is to inculcate the habit of critical thinking, evidence based practices, knowledge and application of principals of bioethics, communication skills and ability to understand group dynamics and effective teamwork.

Rawalpindi Medical University has successfully launched an integrated undergraduate curriculum, which is spiral, modular, integrated vertically and horizontally and at the eighth level of integration (complementary). Now latest advancement is incorporation of Bioethics, soft skills and research as modern teaching learning strategies in the framework for the integrated curricula spanning across all five years.

Bioethics has been introduced as a longitudinal theme in the curriculum, with repetitive themes of professional behaviors, the doctor-patient relationship, integrity, altruism, conflict resolution, and roles of personalities etc. (Harden's Integration Ladder).

Aim of development of integrated curricula is to synchronize the undergraduate curriculum close to international standards, various options were considered in this regard. Our effort is highly influenced by the Bioethics Curriculum developed by Health Care Ethics Committee (HCEC) of the National Bioethics Committee (NBC) Pakistan, who worked to develop this comprehensive document, "Guidelines and Teachers Handbook for Introducing Bioethics to Medical and Dental Students at undergraduate level. In National context, major component of our curriculum has been adapted from this document; video demonstrations for practical sessions are adapted from Centre of Biomedical Ethics and Culture (CBEC) at the Sindh Institute of Urology and Transplantation (SIUT), Karachi. In international context, WHO Document <https://apps.who.int/iris/bitstream/handle/10665/205534/B4401.pdf> of Bioethics curriculum for undergraduate medical students is taken as reference, however it is modified according to our implemental issues, societal needs, and demands of resource constraint environment. The hallmark of integrated Bioethics undergraduate curriculum of RMU is its separate theoretical components incorporated as a longitudinal theme with separate assessment

window spanning across first year to final year MBBS. Integrated Undergraduate Bioethics Curriculum has been elaborated in flow diagram (Fig.1) .



Fig 1: Framework of Integrated Undergraduate Bioethics Curriculum

Theoretical component (IBM: 1-V)*

Practical component (SPC: 1-V)*

VISION

We endow our graduates with quality education, which is accessible, affordable and comparable to leading public sector institutes of the country, addressing the need of society. Our vision is to improve patient safety and care by introducing and implementing innovative education tools, as per international standards

Our vision is to improve patient safety and health of diverse communities by preventing disease, prolonging life, promoting health and wellbeing through the provision of quality health care delivery in an arena of professionalism, scholarship, advocacy and accountability.

MISSION

We are committed to develop well-rounded academics, thinkers, clinicians and researchers by strengthening a global view, broadening intellectual foundation and teaching effective communication. It is our aspiration to cultivate creative and critical thinking skills for problem solving, sensitive to cultural and ethical values and responsibilities. Our graduates will be role models and leaders for society.

Values

- Competence
- Communication
- Professionalism
- Commitment
- Accountability
- Motivation
- Responsibility
- Relevance
- Equity
- Quality
- Cost effectiveness
- Social Justice

GOAL

- To create a culture of excellence for future seven-star doctors by establishing the highest standard of research and medical education, striving for implementation of innovative ways having the strong impact on clinical outcomes, population health and health care services delivery across the nation.
- To serve the people of Pakistan by training our graduates as compassionate and competent physicians. We aspire our students to be the best graduates in the region, meeting international standards with meaningful and effective service to society
- Be the leading public sector hospital in patient care, medical education and research.
- Attract the best talent across the country to develop themselves as the seven star physicians of tomorrow.
- Integration of knowledge, skills and attitude to achieve the competent behaviour in our graduates
- Implementation of Humanities and Bioethics in Undergraduate Medical Education , to develop enlightened physicians who are compassionate and competent to address health care issues in their communities of practice
- Retain and nurture qualified faculty to ensure quality of undergraduate training program
- To set local and global standards for quality patient outcomes – rooted in humanities – creating a culture of excellence to promote a transformative experience for the 21st century clinicians and educators to benefit all humanity.

Program Learning Outcomes* (7 Star Doctor - PMDC)

The Medical Graduate (humanities track) shall be able to:

- Develop insight, imagination and curiosity, define one's unique self, one's values and one's place in the world, while incorporating the qualities of a good physician
- Cognizant with complex situation in professional life, including the role they should play in society, policymaking, and promotion of social justice.
- Display enlightenment and moral virtues to prepare themselves for life and work in a problematic, changing and diverse world.
- Be responsible leaders for their own good and for the good of their family, community and country.

- Be humane and socially equipped individuals, in tune with rights of patients and vulnerable groups
- Develop moral reasoning for ethical dilemmas
- Be experts of critical situational analysis
- Believe in diversity in practice
- Display effective communication

*Terminal outcomes to be achieved at the end of 5 years of undergraduate studies



Curriculum Objectives

Objective of Integrated Bioethics curriculum is

- Incorporate research, professionalism, communication and interpersonal skills as the longitudinal theme in undergraduate medical curriculum
- Development of infrastructure for long term sustainability and acceptability
- Promotion of ethical practices to improve overall health status of the community
- Development of the effective communication skills to achieve the competent behaviour in our future seven star doctors
- Enhancement of the students' capability in effective patient dealing and promoting patient safety
- Setting the standard of excellence for under graduate medical students
- Transform medical education with humanistic approach by adopting community based learning
- To build communities of practice and interdisciplinary connections to enrich experience at national and international level
- Instigate the habit of sound ethical practices

Implementation Barriers & Challenges

Owing to presence of punitive obstacles including overwhelming MBBS schedule, overburdened faculty, lack of motivated and trained faculty, high workload on students, and absence of explicit guidelines from the statutory body, lack of funds, logistics and infrastructure, it was be indeed a great challenge to develop and implement this strategic change.

Implementation of integrated Bioethics curriculum at Rawalpindi Medical University, is an innovative approach specially being a Public Sector University, Rawalpindi Medical University has spearheaded as a leading medical university in country to pursue for development and implementation of integrated curricula at undergraduate level, however there are number of anticipated barriers and resistances. Its practical implementation is only possible by taking all the stakeholders on board through advocacy to change the curricular roadmap, based on evidence generated from other medical institutes, which have gone up the integration ladder and been successful. Main strategic thrust was visionary leadership of Vice Chancellor that motivate and inspire faculty members to work towards the common goal.

Category	Details
Identification of resources	
Personnel /Skills	<ul style="list-style-type: none"> • Inadequate number experienced and qualified faculty • Lack of motivated faculty • Faculty development • Lack of orientation • Resistance by senior faculty • Program acceptance
Time	<ul style="list-style-type: none"> • Extra time • Commitment • Time management
Finances	<ul style="list-style-type: none"> • Venue, logistics, AV Aids, IT Lab , equipment
Infrastructure	<ul style="list-style-type: none"> • Logistics issues, venues for small group sessions, support staff
Administrative	<ul style="list-style-type: none"> • Training courses, workshops_IT staff to support Audio-visual , Administrative staff
Gaining support for curriculum	
Internal	<ul style="list-style-type: none"> • Student feedback / Faculty evaluations by QEC • Peer evaluations , 360 degree feedback
External	<ul style="list-style-type: none"> • Engaging stakeholders •NBEC,SIUT PMC • Higher Education Commission (HEC)
Anticipate the barrier	
Financial and other resources	<ul style="list-style-type: none"> • Limited resources available, being public sector university
Resistance from stake holders	<ul style="list-style-type: none"> • Buy in of senior faculty • Engaging stakeholders
Existing Institutional Support	
Existing Institutional Support & opportunity for continuous professional development	<ul style="list-style-type: none"> • University representation at national and international level • Faculty development • Collaboration with other medical school • Community oriented medical education with focus on population health • Opportunity to learn from real life situation • Use of advance e learning tools digital libraries , Moodle & LMS

Problem Statement

According to report of The Joint Commission on Quality and Patient Safety , unethical behaviour and poor communication skills were linked with adverse events: the result for medical error was 71% and patient mortality 27% .Out of all the serious injuries occurring due to error; 37% was due to communication problem (Health care business and technology).

*Rosenstein, A. H., & O'Daniel, M. (2008). A survey of the impact of disruptive behaviors and communication defects on patient safety. *The Joint Commission Journal on Quality and Patient Safety*, 34(8), 464-471

Impact of unethical medical practice

Impact	Patient	Healthcare professional	Medical educator	Society
Demographic	Increased disease related burden	Increased stress and burden	Students need to be taught more Poor trust in medical profession	Poor trust in medical profession
Economic	Increased cost due to lack of counselling as in medicine, tests, etc.	Loss of patients hence economic loss	Medics leaving country (brain drain)	Increased cost as patients are going to other treatment options
Psychological	Patient dissatisfaction	Discouragement Low morals	Stress increases to improve curriculum and teaching skills	Anger and depression in general public
Health status	Taking patient away from healthcare	Lack of confidence and moral as they lack skills	stress	Depression, anxiety and anger
Social	Hatred against the doctors	Resentment and discouragement	More pressure to improve teaching	Negative impact towards doctors

Evidence in literature

Evidence has supported that humanism and Bioethics should be incorporated in under graduate medical curriculum as longitudinal theme. This approach definitely play a significant role in developing compassionate and humanistic approach and help to equip future physicians with skills that enable them to become empathetic physicians. In current era acquisition of humanistic qualities are considered even more than technical skills , as rightly highlighted by Boyer, “The crisis of our time relates not to technical competence, but to a loss of the social and historical perspective, to the disastrous divorce of competence from conscience.” (Boyer 1997).

Historically it has been supposed that medical students will learn and practicing physicians will exhibit the attributes and behaviours of professionalism when they exposed to clinical arena. It is supposed that medical student will learn professionalism and ethical medical practice when 'they get there', i.e. when the students start their clinical year studies. The clinical years see the medical students informally learning different aspects of the clinical practice, essentially, through medical socialization. Students identify and follow role models who embody responsibility and status. Although, even in the absence of a taught medical curriculum, the value systems informing the practice of these 'experts' are intact, there are instances where conflicts in the see and do of experts confuse the medical students, who find themselves distressed by the dichotomy of behaviors and attitudes exhibited by these professionals, termed traumatic de-idealization (Mueller P. S. (2015).

Lack of role models is another contributing factor. The teaching medical faculty itself is a product of the traditional system of medical education; their personal and professional development occurring through the age-old tradition of apprentice-ship model and role-modelling through socialization (Dornan T, 2005). This may have been valid when they themselves were medical students and the medical practice was smaller, with simpler problems and issues, and intact ethical values and behaviors (Elzubeir and Rizk, 2001). In addition, the phenomenal evolution of specialized medical care has rendered the sole use of this methodology of learning professionalism as inadequate (Ludmerer KM, 1999).

Lack of inter-professional respect and understanding, necessary for the medical team to work efficiently (Team role modelling), is also missing from our medical culture (Serour, 2015).

In past couple of years the medical professionalism has been strongly criticized for breaches of professionalism in form of conflict of interest , financial motives supersede their professional practices , violations, malpractices inappropriate behaviours . Another major factor compounding the issue is the educational environment itself; the doctors who are a product of the current educational system exhibit the values of mistrust, selfishness and greed (<https://www.bbc.com/news>).The personal comes before the professional. This reflects a trend of personal gain over national interest, currently prevalent in the society at large. The thriving culture of private hospitals and medical colleges has been evolving into a billion-rupee industry little checks and balances promoting unethical behaviours and practices (<https://dailytimes.com.pk/>).

Lack of role models is another contributing factor, the teaching medical faculty itself is a product of the traditional system of medical education; their personal and professional development occurring through the age-old tradition of apprenticeship and role-modeling through socialization (Dornan T). This may have been valid when they themselves were medical students and the medical practice was smaller, with simpler problems and issues, and intact ethical values and behaviors (Elzubeir MA, Rizk D,2001). Sadly, the phenomenal evolution of specialized medical care has rendered the sole use of this methodology of learning professionalism as inadequate (Ludmerer KM,1999).

Lack of inter-professional respect and understanding, necessary for the medical team to work efficiently, is missing from our medical culture. The stratosphere of a medical doctor does not include all the pillars of the whole range of persons and systems which make up the medical profession. This has led to patient suffering and failure of the medical health-care system in restoring the doctor-patient relationship to its original prestige (Kumar R, Ahmed J, Shaikh BT, Hafeez R, Hafeez A).

In response there is strong realization that teaching and assessment of professionalism do not occur by chance alone and do not left to assumption. For medical students and practicing physician to be through professional , Fundamental elements of professionalism(ethics, communication skills) and attributes of professionalism— altruism , accountability, , humanism, and excellence should be intentionally taught and assessed. Moreover, assessment drives students to learn and adherence to professionalism principles determines whether students have learn this competency and also highlight deficiencies and area of improvement (Cruess, 2005).

In view of these trends, there has been a much-needed reform in the undergraduate medical curriculum to incorporate Bioethics curricula at different levels of teaching/learning and assessment. There is a great need that the attributes of ethics and professionalism should be a part of the explicit curriculum (both in teaching/learning and in assessment) which is currently taught at Rawalpindi Medical University. This is to ensure that the dehumanized care the medical faculty is accused of, and the spectrum of medical errors (Robertson JJ, 2018) arising along with the advancement of the medical sciences, is self-regulated by the university in alignment with setting appropriate standards in undergraduate and postgraduate medical education as mandated by the accrediting bodies.

The hallmark of undergraduate Bioethics curricula is with formative assessment (assignments at LMS) , is meant to determine how much the students have acquired this core competency, and if not, what are the areas of gaps, and what the curriculum developers at RMU can do to help the students achieve this very important competency.

Rationale for the Study

Medical professionals share a common set of tradition and values as healers and physicians, yet cultural differences owing to geographical boundaries, religious beliefs, customs and beliefs strongly influence professional attributes (Cruess 2010).

Current versus Ideal approach of patient/families, health care professionals, educators to address the problem

Approach	Patient	Health Care Professionals	Medical Educators	Society
Current approach	<ul style="list-style-type: none"> •Lack of trust in medical profession as a whole • Lack of satisfaction from doctors • Patients queries not solved • Seeking irrelevant information from internet •Compromised patient care leading to dissatisfaction •anger and annoyance on different platforms. 	<ul style="list-style-type: none"> •Making effort to improve ethical practices, professionalism & communication skills. - Role modelling - (without any formal training) 	<ul style="list-style-type: none"> •Emphasis on teaching Bioethics and good ethical practicing •Declared curriculum address the competency of professionalism – lack of role modelling 	<ul style="list-style-type: none"> • Blame game • General hatred against doctors • Negative propaganda through media and news • Relying on alternative and complimentary medicine
Ideal approach	<ul style="list-style-type: none"> • Have faith in doctors and the profession •Trustworthy Patient-Doctor Relationship 	<ul style="list-style-type: none"> •Bioethics curriculum must be incorporated in the formal curriculum both at undergraduate and postgraduate level •CMEs should be arranged for practicing health care professionals •Communication skills workshop - Role play (Reflective), Refresher courses and workshops on Bioethics 	<ul style="list-style-type: none"> •Bioethics and Medical Professionalism must be incorporated in the formal curriculum •Assessment of the learning outcomes •360 degree feedback 	<ul style="list-style-type: none"> • Root cause analysis • Public awareness through electronic and print media to portray positive images of healthcare personal

Framework of Bioethics Curricula at Rawalpindi Medical University



The foundation of this framework is medical knowledge and clinical competence. Being a physician require clinical competence in terms sound medical knowledge and technical skills. Pillars are built on this foundation, pillars represent key attributes of professionalism/ key components of good ethical practice which students are supposed to learn throughout their professional carrier spanning across five years : Foundation Module (1st Year MBBS) , Basic Ethics Module (2nd Year MBBS), Ethics of Physician Pharmaceutical Industry (3rd Year MBBS), Public Health Ethics (4th Year MBBS), Clinical Ethics (Final Year MBBS), constitute

the totality of framework is Bioethics Curricula of RMU . Aim of Integrated Bioethics Curricula spanning across five years is to equip medical students with sound ethical knowledge to work effectively as accountable, altruistic thorough professionals who is able to work effectively as a part of multi-disciplinary team and follow ethical practices throughout the professional carriers .Taking on identity of through professional in medical profession aims at producing competent physician who are able to respond to pressing health issues of communities, nation and region they have the mandate to serve. As implied by Osler, “*the goal is to have competent and trustworthy physicians who have internalized and manifest attributes of professionalism and sound ethical practices*”.

Module - I - FOUNDATION MODULE

1st year MBBS

Premise:

Theoretical Component (Integrated Bioethics Method: IBM-1)

Theme:

In first year MBBS, Theoretical component (UGBC-1) aims to make new entrants cognizant with historical perspective of Medical ethics. The history of medical ethics developed over centuries, as it has been highlighted that ethics are "...born in scandal and rendered in protectionism. In the allopathic system of medicine, such developments commenced from the time of Hippocrates (the Hippocratic Oath) and over time, it has led to development of several codes. (These include the Helsinki Declaration, World Medical Code and Belmont Report).

Since ethics is context specific entity and influenced by sociocultural and religious perspective, development of bioethics curriculum based on country and religious specific situations is considered very necessary to make teaching of ethics more relevant. Moreover, ethical requirement ethical Code of Conduct & Professionalism as per statutory body PM&DC.

Practical Component (Student Practical Component: SPC-1)

Theme

An Empirical Approach towards making undergraduate medical students cognizant about Ethical Dilemma in historical perspective of medical ethics and its relevance in teaching Ethics in the Medical Curriculum. Understand the importance of maintaining animals' rights and dignity while performing animal experimentation. Establish professionalism and Communication skills during Laboratory sessions .Make the students learn how to collaborate with each other to work effectively as team member, how to maintain team dynamics, show mutual respect and complete assigned task in professional manner.

Ethics Curriculum 1st year MBBS

Theoretical Component (Integrated Bioethics Methods -1)					
Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Session-1 Time: 60-min Cognitive Domain					
Introduction to History of Medical Ethics	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Introduction to the Hippocratic Oath (5th Century BCE), basis of modern oaths administered to medical graduates • Understand evolution of contemporary bioethics, its characteristics and relevance to research and practice 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Appraise the historical perspective of Hippocratic Oath (5th Century BCE) . C2 • Understanding the beginnings of Contemporary Bioethics to address ethical dilemmas raised by rapid advances in medical science and biotechnology. C2 	<p>LGIS 1hr contact session in 2-4 parallel classes will be conducted by Senior Faculty from basic sciences (Anatomy, Physiology & Biochemistry)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination in pool of total 04 MCQs. Result / marks obtained will contribute towards Internal assessment (IA) in 1st Prof. MBBS exam.</p>	<p>Guidelines and Teachers Handbook for Introducing Bioethics to Medical and Dental Students</p> <p>http://nbc-pakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2C-2017.pdf</p> <p>Pakistan Medical and Dental Council, and Higher Education Commission, Islamabad. Curriculum of MBBS. Date unknown [cited 2019 Jun 30]. Available from: http://pmdc.org.pk/LinkClick.aspx?fileticket=EKfBIOSDTkE%3d&abid=102&mid=556 WHO : Module for Teaching Medical Ethics to Undergraduates file:///C:/Users/drkas/Downloads/WHO%20Module%20for%20Teaching%20Medical%20Ethics%20to%20Undergraduate.pdf</p>
Session-2 Time:60 Mins					
Islamic concept of Bioethics	<ul style="list-style-type: none"> •Islamic concept of Bioethics: Perception, Scope and Application in medical and healthcare 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Enlist 5 principles of medical Ethics. C1 • Correlate the concept of Islamic principles of medical ethics with its application in medical and healthcare settings .C2 	<p>LGIS 1hr contact session in 2-4 parallel classes will be conducted by Senior Faculty from basic sciences (Anatomy, Physiology & Biochemistry)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination in pool of total 04 MCQs. Result / marks obtained will contribute towards Internal</p>	<p>Regional Committee for the EM/RC52/7 Eastern Mediterranean Islamic code of medical and health ethics</p> <p>https://applications.emro.who.int/docs/em_rc52_7_en.pdf</p> <p>Islam and the four principles of medical ethics</p>

				assessment (IA) in 1 st Prof. MBBS exam.	<p>Mustafa, Y. (2014). <i>Islam and the four principles of medical ethics</i>. <i>Journal of Medical Ethics</i>, 40(7), 479–483. doi:10.1136/medethics-2012-101309</p> <p>Ahmed AS (1993) <i>Living Islam</i>. (BBC Books, London), pp 21–56. Google Scholar Gatrad AR, Sheikh A</p> <p>Medical ethics and Islam: principles and practice. <i>Archives of Disease in Childhood</i> 2001;84:72-75.</p>
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Session-3
Time: 60-min

Introduction to Professional Ethics and PM&DC Code of Conduct	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Introduction to Professional Ethics and PM&DC Code of Conduct • Purpose of medical code of conduct by Regulatory body PM&DC; covering following subtopics <ul style="list-style-type: none"> • What Is the ‘Professional Ethics and Code of Conduct’? • Why to Have the Code of Conduct? • Who Needs to Follow the Code of Conduct? • Who is it for? • What Are the Code of Conduct Requirements? 	<p>At the end of the session students should be able to</p> <ul style="list-style-type: none"> • Cognizant with need for professional code of conduct by PM&DC. C1 • Elaborate the purpose and relevance for medical code of conduct at undergraduate level . C2 	<p>LGIS 1hr contact session in 2-4 parallel classes conducted by Senior faculty</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination in pool of total 04 MCQs. Result / marks obtained will contribute towards Internal assessment (IA) in 1st Prof. MBBS exam.</p>	<p>PMDC Code of Ethics: http://www.pmdc.org.pk/LinkClick.aspx?fileticket=v5WmQYMvhz4%3D&tabid=102&mid=554</p>
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Session-4
Time: 60-min

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools and	Suggested reading sources
History of Medical Ethics	<p>Discussion on Health Research ethics focusing;</p> <ul style="list-style-type: none"> •Historical perspective of Tuskegee studies, Willow brook Experiment •Codes of medical ethics: traditional foundations and contemporary practice 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Explain the meaning of the term “ethics”. C1 • Describe the historical perspective of global development of medical ethics. C1 	<p>LGIS 1hr contact session in 2-4 parallel classes, Conducted by Senior faculty.</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination in pool of total 04 MCQs. Result / marks obtained will contribute</p>	<p>Guidelines and Teachers Handbook for Introducing Bioethics to Medical and Dental Students</p> <p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2C-2017.pdf</p>

	<ul style="list-style-type: none"> •Nuremburg code, Belmont report, Declaration of Helsinki and importance of historical background of ethics in current research trends • General ethical principles including explanation of 04 basic principles of Beneficence, non-maleficence, respect and justice. <ul style="list-style-type: none"> - Interpretation research ethics for; - Informed consent and confidentiality in research HR 	<ul style="list-style-type: none"> • Describe the codes of medical ethics and their implications. C1 • Recognize ethical issues relevant to the case situation and apply the ethical codes as appropriate. C2 • Discuss the development of indigenous ethical codes in the South-East Asian Region. C2. • Demonstrate sensitivity to cultural diversity in medical care. C3 		<p>towards Internal assessment (IA) in 1st Prof. MBBS exam.</p>	<p>The Nuremberg Code: http://www.hhs.gov/ohrp/archive/nurcode.html</p> <p>10 WMA Declaration of Helsinki: http://www.wma.net/en/30publications/10policies/b3/</p> <p>CIOMS Guidelines: http://www.cioms.ch/publications/layout_guide2002.pdf .</p> <p>Nuffield Council on Bioethics Guidelines: http://www.sirc.org/news/nuffield.shtml</p>
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**Practical Session-
Time: 120 min each (2hrs)**

Practical session-1

Affective & Psychomotor domain

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Laboratory Ethics	<p>Discussion will cover basic elements of Laboratory Ethics focusing;</p> <ul style="list-style-type: none"> • Importance of medical professionalism for the medical student; including respect and gratitude towards colleagues • Code of conduct: Collaboration, partnership, Teamwork , Maintaining dress code, religion obligations of medical doctor , focus on physicians' character, virtues and duties • Delineate the ethical consideration while performing procedures on real patients or simulated patients in Laboratory setting 	<p>At the end of the session students should be able to ;</p> <ul style="list-style-type: none"> • Understand the importance of taking permission before performing procedures (drawing blood, administering injections etc.) during laboratory sessions .A1 • Show Respects other health professional team members and complete assigned task in professional manner.A1 •Employ collaborative negotiation to resolve conflict, anger, confusion and misunderstanding. A2 	<p>Case based discussion in 2 hr contact session in 4-6 parallel classes conducted by faculty of respective departments</p> <p>Role plays</p> <p>Reflective writing</p>	<p>Assignment based assessment under aggregate Marks (Internal Assessment)</p> <p>Assignment to be uploaded on LMS</p>	<ul style="list-style-type: none"> - Real life scenarios in form of Case base learning /problem based learning (PBL) To be share with students one week before the session <p>Introduction to criteria for assessment of behavior, code of conduct and professionalism at RMU</p>
Ethics of research involving animals	<ul style="list-style-type: none"> • Scientific rationale for using animals in different phases of teachings of medical students 	<ul style="list-style-type: none"> • Understand the importance of maintaining animals rights and dignity while performing animal experimentation 	<p>Small group interactive 4-6 interactive parallel sessions</p>	<p>Students seminar/ group presentation on proposed topic</p>	<p>https://www.nuffieldbioethics.org/wp-content/uploads/The-ethics-of-research-involving-animals-full-report.pdf</p>

Ethical Dilemma	<p>-</p> <ul style="list-style-type: none"> Historical perspective of famous ethical dilemmas and its relevance with development of codes and components of contemporary bioethics (an individual components will be expanded/repeated using real cases from historical breaches in ethics) 	<ul style="list-style-type: none"> Understand the historical perspective of medical ethics and its relevance in development of modern codes and law Explicate the background of ethical codes (Nuremburg code) and importance of ethics in health research 	<p>Short presentation: Ethical principles in medical practice</p> <ul style="list-style-type: none"> Brainstorming: interactive session to identify the potential breaches of ethical principle in medical practice. Group work: Measures to promote ethical principles in medical practice. 	<p>Role plays Video demonstration</p> <p>"The Deadly Deception," Nova video written, produced and directed by Denisce Di Anni, WGBH Boston, 1993 production. [This video is owned by many libraries and is currently distributed by Films for the Humanities and Sciences, P.O. Box 205, Princeton, NJ 08543-2053 https://onlineethics.org/cases/ethics-science-classroom/tuskegee-syphilis-study</p>	<p>Cases in Medical Ethics https://www.scu.edu/ethics/focusareas/bioethics/resources/cases-in-medical-ethics-student-led-discussions/ WHO Handbook of Medical Ethics: Part 1/ Chapter 1: Ethics and medical ethics and Chapter 2: Human civilization and medical ethics from WHO Handbook of Medical Ethics, 2009</p> <p>George J Annas; Michael A Grodin, eds. The Nazi doctors and the Nuremberg Code: human rights in human experimentation, New York: OUP; 1992</p> <p>Watts J. Tokyo Victims of Japan's notorious Unit 731 sue. Lancet. 2002 August 24; 360 (9333): 628</p> <p>Final Report of the Tuskegee Syphilis Study Legacy Committee¹. University of Virginia Health Systems. 1996. Available from: http://www.hsl.virginia.edu/historical/medical_history/bad_blood/report.cfm.</p> <p>Tanne JH. President Obama apologises to Guatemala over 1940s syphilis study. News, BMJ. 2010 October 4; 341: c5494.</p>
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Module - II – BASIC BIOETHICS MODULE

2nd year MBBS

Premise:

Theoretical Component (Integrated Bioethics Methods: IBM-II)

Theme:

This module will cover Oath/Declaration by a Registered Medical or Dental Practitioner at time of graduation and importance of Pakistan Medical & Dental Council Code of Ethics of Practice for Medical and Dental Practitioners. This module make students cognizant with importance of Pakistan Medical and Dental Council of Pakistan to maintain the register of Medical and Dental practitioners, regulate the standards of medical practice, protect the interests of the patients, supervise medical education, and give guidelines on ethical issues. Another important theme of this module is explanation of six basic ethical principles: autonomy, beneficence, non-maleficence & justice and explaining the process of ensuring patient autonomy, beneficence, non-maleficence, respect & justice while informing/ deciding on a treatment modality.

Practical Component (Student Practical Component: SPC -II)**Theme**

This module will cover historical aspect of ethical dilemma and the potential risk inflicted to participants as a result of violation in ethical practices from involvement in scientific research in past. Students will get familiar with the concept that how ethical dilemma in past led to evolution of several contemporary documents by video demonstration and case based discussions on real life scenarios violation in ethical principles namely autonomy, beneficence, non-maleficence and justice. Students will get familiar with the concept that how ethical dilemma in past led to evolution of several contemporary documents which have been created to minimize such exploitation and safe guard the rights of participants.

Ethics Curriculum 2nd year MBBS

Theoretical Component (Integrated Bioethics Methods-II)				
Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Session-1 Time: 60-min Cognitive Domain				

<p style="text-align: center;">Pakistan Medical & Dental Council Code of Ethics</p>	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Pakistan Medical & Dental Council Code of Ethics for Practice for Medical and Dental Practitioners • Oath/Declaration by a Registered Medical or Dental Practitioner at time of graduation • Role of regulatory body PM&DC/PMC in maintaining ethical standards for medical/dental graduates • Authority of PM&DC as regulatory body to take disciplinary actions, which may be required for criminal convictions or serious professional misconduct of a doctor. • History and legal framework of the Pakistan Medical and Dental Council (PMDC) • Jurisdiction of the Pakistan Medical and Dental Council (PMDC) 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Appreciate the value of oath and pledge taken by medical student at the time of graduation from medical school.C2 • Appraise the importance of principles to be followed by the medical and dental practitioners to fulfil the social contract with the society in order to win the trust of the public in the profession.C2 • Cognizant with disciplinary proceedings in case of violation of rules laid down by regulatory body 	<p>LGIS 1hr contact session in 2-4 parallel classes will be conducted by Senior Faculty From Basic Sciences (Anatomy, Physiology & Biochemistry)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 2nd Prof. MBBS exam.</p>	<p>https://www.pmc.gov.pk/Documents/law/PMDCode%20Code%20of%20Ethics%202018.pdf</p> <p>section 3 (Principles of Medical Ethics in Social Context), page 21</p>
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Session-2
Time:60 Mins

<p style="text-align: center;">Islam & Teachings of Bioethics</p>	<p>Discussion will cover;</p> <ul style="list-style-type: none"> •Islam the Teaching of Medical Ethics •Oath of Muslim doctor • Islamic principles of medical ethics corresponding to autonomy , beneficence, non-maleficence and justice 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Conceptualize the Islamic teachings of medical ethics • Outline the main points in oath of Muslim doctor • Correlate the 4 principle of medical ethics with principles of Islamic medical ethics, 	<p>LGIS 1hr contact session in 2-4 parallel classes will be conducted by Senior Faculty From Basic Sciences (Anatomy, Physiology & Biochemistry)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 2nd Prof. MBBS exam.</p>	<p>http://jsmu.edu.pk/assets/docs/updates/news/20181218%20OATH%20CONVOCATION%20FOR%20MBBS.PDF</p> <p>http://nbc-pakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (PAGE- 49)</p> <p>Pakistan and Biomedical Ethics: Report from a Muslim Country Special Section: International Voices Farhat Moazam, Aamir M. Jafarey</p> <p>The international Islamic code for medical and health ethics : december 11-14, 2004 29 shawwal - 2 zu alkaida Cairo, Egypt</p>
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Ethics of social media & advertising	<p>Discussion should cover;</p> <ul style="list-style-type: none"> Ethics of social media & advertising Ethics involve in Publishing or broadcasting information Certificates, Reports and other documents Teaching Photography and Consent 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> Delineate the principles of ethics involved in social media & advertising including; Publishing or broadcasting information Certificates, Reports and other documents Teaching Photography and Consent 	<p>LGIS 1hr contact session in 2-4 parallel classes will be conducted by Senior Faculty From Basic Sciences (Anatomy, Physiology & Biochemistry)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 2nd Prof. MBBS exam.</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (PAGE 49)</p>
Ethical principles	<p>Discussion should cover;</p> <ul style="list-style-type: none"> Ethical principles (autonomy , beneficence, confidentiality, privacy, justice) 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> Elaborate General ethical 06 basic ethical principles: autonomy, beneficence, non-maleficence & justice Explain the process of ensuring patient autonomy, beneficence, non-maleficence, respect & justice while informing/ deciding on a treatment modality 	<p>LGIS 1hr contact session in 2-4 parallel classes will be conducted by Senior Faculty From Basic Sciences (Anatomy, Physiology & Biochemistry)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 2nd Prof. MBBS exam.</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf</p>
Practical Session- Time: 120 min each (2hrs)					
Ethical dilemmas Involving breach in Autonomy	<p>Discussion should cover;</p> <ul style="list-style-type: none"> Ethical dilemmas in healthcare practice involving breach in principle of autonomy 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> Analyze ethical dilemmas in healthcare practice involving breach in principle of autonomy Explain what procedures adopted to maintain patient autonomy Identify situations in which a doctor may have to take decisions in the best interests of the patient 	<p>Short video demonstration on violation of Ethical principle of autonomy from suit CBEC Video resources</p>	<p>Assignment based assessment involving real life case scenarios under aggregate Marks (Internal Assessment)</p> <p>Assignment to be uploaded on LMS</p>	<p>https://siut.org/bioethics/cbec-videos/</p>

<p style="text-align: center;">Ethical dilemmas Involving breach in beneficence and non-maleficence</p>	<p>Discussion should cover;</p> <ul style="list-style-type: none"> Ethical dilemmas in healthcare practice involving breach in principle of beneficence and non-maleficence 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> Analyze ethical dilemmas in healthcare practice involving breach in principle of beneficence and non-maleficence Explain what procedures adopted to maintain the principle of beneficence and non-maleficence in challenging situations Identify situations in which a doctor may have to take decisions in the best interests of the patient considering the principle of beneficence and non-maleficence 	<p>Short video demonstration on violation of Ethical principle of beneficence and non-maleficence from suit CBEC Video resources</p> <p>Students deliberations and reflections</p> <p>Reflective writing</p>	<p>Assignment based assessment involving real life case scenarios under aggregate Marks (Internal Assessment)</p> <p>Assignment to be uploaded on LMS</p>	<p>https://siut.org/bioethics/cbec-videos/</p>
<p style="text-align: center;">Ethical dilemmas Involving breach in Justice</p>	<p>Discussion should cover;</p> <p>Ethical dilemmas practice involving breach in principle of justice</p>	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> Analyze ethical dilemmas in healthcare practice involving breach in principle of justice Explain what procedures adopted to maintain the principle of justice in challenging situations Identify situations in which a doctor may have to take decisions in the best interests of the patient considering the principle of justice 	<p>Short video demonstration on violation of Ethical principle of beneficence and non-maleficence from suit CBEC Video resources</p> <p>Students deliberations and reflections</p> <p>Reflective writing</p>	<p>Assignment based assessment involving real life case scenarios under aggregate Marks (Internal Assessment)</p> <p>Assignment to be uploaded on LMS</p>	<p>https://siut.org/bioethics/cbec-videos/</p>

Module - III – BASIC BIOETHICS MODULE

3rd year MBBS

Premise

Theoretical Component (Integrated Bioethics Methods: IBM-III)

Theme:

Rapid evolution of Medical profession owe significant contribution of pharmaceuticals industry, device development and artificial intelligence. However, a growing area of ethical concern all over the world is the increasing influence of the industry on the prescribing practice of physician. While acknowledging the importance of the pharmaceutical and device industries in modern day healthcare, it is also essential to sensitize the young physicians about the ethical concerns that can emerge from unregulated interaction with the industry. This module will also make them aware about the duties of Physicians in General, the duties of Physicians to the sick, duties of Physicians to each other. Since Pharmacology is major examining subject in 3rd year, important concepts of Pharmacovigilance, high alert medication, adverse events reporting guidelines, healthcare professionals, tools to minimize errors, Disclosure policy.

Practical Component (Student Practical Component: SPC-III)**Theme**

Practical aspect will be covered through Video demonstration, case based discussion and supervised visit to clinical wards to cover practical aspects of pharmacovigilance, reporting medical errors and filing the respective form.

Ethics Curriculum 3rd year MBBS

Topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
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<p style="text-align: center;">Ethical Guidelines for Physician Pharmaceutical Industry interaction</p>	<p>Discussion will cover;</p> <p>Ethical Guidelines for Physician Pharmaceutical Industry interaction</p> <p>Ethical Guidelines for</p> <ul style="list-style-type: none"> -Disclosure -Gifts/Giveaways/Drug samples -Scholarships & Educational Grants -Research -Pharmaceutical Industry -Funding for CME Events -Promotions of Products 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Outline the ethical principles of Physician's interaction with the pharmaceutical industry • Delineate the General Principles and ethical guidelines for Physician Pharmaceutical Industry interaction 	<p>LGIS</p> <p>1hr contact session in Pa2rallel classes will be conducted by Senior Faculty (Assistant professor or Subject Specialist from Pharmacology, Pathology & Forensic Medicine Dept)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 3rd Prof. MBBS exam.</p>	<p>NBC Guidelines for Healthcare Professionals* Interaction with Pharmaceutical Trade and Industry</p> <p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 276)</p> <p>nbcPakistan.org.pk/assets/ppi_guidelines_may_2011-1-final-copy-on-PHRC-wbsite.pdf Open source document</p> <p>http://karachibioethicsgroup.org/PDFs/Karachi_Bioethics_Group_Ethical_Guidelines.pdf Karachi Bioethics Group Institutional Ethical Guidelines for Physician Pharmaceutical Industry Interaction</p>
<p style="text-align: center;">Duties of Medical and Dental Practitioners (International Code of Medical Ethics)</p>	<p>Discussion will cover;</p> <p>Duties of Medical and Dental Practitioners (International Code of Medical Ethics)</p>	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Outlines the ethical principles and Standards in Pakistan Medical and Dental Council (PMDC) Code of Ethics • Enlist the duties of Physicians in General • Enlist the duties of Physicians to the Sick • Enlist the duties of Physicians to each other 	<p>LGIS</p> <p>1hr contact session in Pa2rallel classes will be conducted by Senior Faculty (Assistant professor or Subject Specialist from Pharmacology, Pathology & Forensic Medicine Dept)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 3rd Prof. MBBS exam.</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 44)</p> <p>http://www.pmdc.org.pk/Ethics/tabid/101/Default.aspx Open source document</p>

<p style="text-align: center;">Medical Errors</p>	<p>Discussion will cover;</p> <p>Medical Errors</p> <ul style="list-style-type: none"> • Definitions • Background • Why medicine is susceptible to error • Areas susceptible to error • Reluctance to report - Classification of medical errors 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Understand Medical Errors • Explain the background of medical errors • Elaborate why medicine susceptible to error • Delineate the reasons of reluctance to report • Classify the medical errors 	<p>LGIS 1hr contact session in Pa2rallel classes will be conducted by Senior Faculty (Assistant professor or Subject Specialist from Pharmacology, Pathology & Forensic Medicine Dept)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 3rd Prof. MBBS exam.</p>	<p>Medical Errors: The Scope of the Problem. Fact sheet, Publication No. AHRQ 00-P037. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/qual/errba</p> <p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 195)</p>
<p style="text-align: center;">Pharmacovigilance</p>	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Pharmacovigilance high alert medication • Adverse events reporting guidelines for healthcare professionals • Tools to minimize errors • Disclosure policy 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Conceptualize the Pharmacovigilance • Define Pharmacovigilance (WHO,DRAP) Guidelines on the management of high alert medication • Elaborate adverse events reporting guidelines for healthcare professionals. Enlist the various tools available to minimize the medical errors • Elaborate the disclosure policy • Role of Pharmaceutical industry in research enterprise and how the “conflict of interest” affects research. (some overlap with Pharma-physician issues in clinical ethics) 	<p>LGIS 1hr contact session in Parallel classes will be conducted by Senior Faculty (Assistant professor or Subject Specialist from Pharmacology, Pathology & Forensic Medicine Dept)</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 3rd Prof. MBBS exam.</p>	<p>https://www.dra.gov.pk/wp-content/uploads/2022/04/Adverse-Events-Reporting-Guidelines-for-Healthcare-Professionals-Edition-01.pdf</p> <p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 195)</p>

**Practical Session-
Time: 120 min each (2hrs)**

Practical session-1 Affective domain /Psychomotor

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
<p style="text-align: center;">Medical Error</p>	<p>Discussion will cover;</p> <p>Importance of reporting medical errors, its analysis and how to disclose medical errors</p>	<p>At the end of the session students should be able to;</p> <p>Understand the importance of reporting medical errors, its analysis and how to disclose medical errors</p>	<p>Case based discussion</p>	<p>Assignments on the filling the forms and various tools available to report medical errors</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 190)</p>

Medical negligence	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Medical negligence and near misses in the clinical setting 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Conceptualize the ethical discourse on why we err, and what to do when we do 	<p>Video demonstration on depicting incidents of error</p>	<p>Students deliberations Reflective writing Maintaining reflective logs</p>	<p>Teaching Video To Err is Human: https://vimeo.com/153865932</p>
Medical error	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Error reporting form • Error analysis form • WHO guidelines for surgical procedure safety • Guidelines for prevention of medication error • Guidelines for prevention of diagnostic error 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Perform the pharmacovigilance in clinical setting with special focus on performing pharmacovigilance and filling following forms <ul style="list-style-type: none"> a. Error reporting form b. Error analysis form c. WHO guidelines for surgical procedure safety d. Guidelines for prevention of medication error e. Guidelines for prevention of diagnostic error 	<p>Supervised visit to clinical wards and supervised sessions on practical aspects of reporting medical errors and filing the respective form</p>	<p>Assignment based assessment on performing the pharmacovigilance of assigned ward under aggregate Marks (Internal Assessment)</p> <p>Assignment to be uploaded on LMS</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 194)</p>

Module - IV – BASIC BIOETHICS MODULE

4th year MBBS

Premise

Theoretical Component (Integrated Bioethics Methods: IBM-IV)

Theme:

Theoretical teachings of Research will be covered under heading of Integrated Undergraduate Research Curriculum (IUGRC) by Community Medicine Department, Reproductive Health Ethics by Gynae & Obs. Dept. and Mental Health Ethics by Dept. of Psychiatry. Purpose of this module is to make students aware of different types of scientific misconducts and ways to avoid them. Important concepts related to patient-doctor relationship including Confidentiality, Truth telling, disclosure, informed consent and maintaining privacy and confidentiality. Composition and function of ERC to safe guard the rights and privacy of participants. Reproductive Health Ethics and important Legislation related to reproductive health , mental Health Ethics including needs of the mentally ill with emphasis on the concept of consent/capacity; confidentiality/sharing of information, pre requisites of inform consent in mentally ill patients .

Practical Component (Student Practical Component: SPC-IV)

Theme

Practical component includes development of inform consent, attending mock ERB to review research projects, case based discussions, role plays and video demonstration on real life scenarios involving breaches in patient confidentiality and privacy.

Ethics Curriculum 4th year MBBS

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Doctor-patient relationship	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Doctor-patient relationship <ul style="list-style-type: none"> – Confidentiality – Truth telling /disclosure – Informed consent 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Discuss the ethical principles applicable within the doctor patient relationship • Describe the different types of consent and the situations in which obtaining consent is required • Recognize the importance of telling the patient the truth about his/ her medical condition • justify when it is important to withhold information from a patient/ relative • Analyse the doctor's role when there is disagreement between the doctor's view and the views of patient, guardians or relatives • Demonstrate understanding of the elements and process of informed consent in research • Appreciate differences between clinical care and clinical research and its effect on participants (therapeutic misconception) • Intricate concept of vulnerability in context of research and the necessity of additional safeguards to protect vulnerable population 	<p>LGIS 1hr contact session in Parallel classes will be conducted by Faculty Of Community Medicine , Eye & ENT</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 4th Prof. MBBS exam.</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 54)</p> <p>WHO Module for Teaching Medical Ethics to Undergraduate.pdf (page 9)</p>
Reproductive ethics	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Legal perspective of abortion • Islamic perspective of abortion 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Discuss legal perspective of abortion in light of Pakistan penal code • Elaborate Islamic perspective of abortion in light of Quran & Hadith 	<p>LGIS 1hr contact session in Parallel classes will be conducted by Faculty Of Community Medicine , Eye & ENT</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 4th Prof. MBBS exam.</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 152)</p> <p>Abdel Rahim Omran, Family Planning in the Legacy of Islam, (London, New York: Routledge publishers, 1992)</p> <p>Sharmeen Khan, "Legal aspects of abortion: An international overview," Bioethics Links vol. 1, no. 2 (2005)</p>

Research Ethics	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Discuss different types of “Plagiarism” and • Outline “scientific misconduct” related to research and publication • Elaborate the significance of intellectual property in relation to medical writing • Intricate the issues related to authorship criteria • Discuss the ICJME Guidelines 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Demonstrate understanding of different types of “Plagiarism” and “scientific misconduct” as ways of lying, stealing or Cheating related to research and publication • Describe the concept of “intellectual property” in reference to research ideas, medical writing, proposals, data, publication • Identify issues related to authorship criteria for scientific journals • Describe the Authorship criteria according to ICMJE Guidelines • Identify potential sources of unethical conduct in dissemination of research such as plagiarism, fabrication of data, duplicate publication and gift authorships. 			
Function of Ethical Review Board	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Ethics Review Committee (ERC) why is it needed, historical importance, composition and working (process of review) • Review of mock research proposals 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Conceptualize the need of ERC • Elaborate the composition and function of ERC • Review the mock research proposals from ethical perspective 	<p>LGIS 1hr contact session in Parallel classes will be conducted by Faculty Of Community Medicine, Eye & ENT</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 4th Prof. MBBS exam.</p>	
Mental Health Ethics	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Ethical and legal issues related to mentally ill patient 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Discuss the ethical and legal challenges of the mentally ill and how they are different from those with physical illness with emphasis on their vulnerability and the risks involved. • Discuss how the needs of the mentally ill are different from those with physical illness (with emphasis on the concept of consent/capacity; confidentiality/sharing of 	<p>LGIS 1hr contact session in Parallel classes will be conducted by Faculty Of Community Medicine, Eye & ENT</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in 4th Prof. MBBS exam.</p>	

information; working with the families; risk assessment etc) in the context of legal, socio-cultural and religious factors in Pakistan

Practical Session-
Time: 120 min each (2hrs)

Practical session-1 Affective domain /psychomotor

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Privacy & Confidentiality	<p>Discussion will cover;</p> <p>Ethical aspects of maintaining privacy and confidentiality</p>	<p>At the end of the session students should be able to;</p> <p>Students should be able to appreciate and discuss ethical dilemmas related to –</p> <ul style="list-style-type: none"> • Consent for examination (non-intimate/ intimate) • Consent for performing procedures (drawing blood, administering injections/ IV lines, lumbar puncture etc.) • Examining or performing procedures on the anesthetized patient • Breach in Patient’s privacy and confidentiality 	<p>Cases for Discussion</p> <p>Role plays</p>	<p>Case based discussions , reflections to be uploaded on LMS</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 74)</p>
Inform consent	<p>Discussion will cover;</p> <p>Prerequisites of inform consent in different situations</p>	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Recognize the importance of obtaining valid consent from a patient for investigations and treatment • Analyse how to proceed if a patient refuses treatment • Elucidate how to proceed if a patient is incompetent to give consent • Reflect when it is justifiable to refrain from obtaining patient consent • Formulate the decision about giving relevant information to a patient or family by a medical student/doctor • Critically appraise the Inappropriate and Appropriate Informed Consent Form 	<p>Video demonstration</p> <p>The Sound of Silence: https://vimeo.com/51587494</p> <p>The movie explores cultural questions of informed consent from women in a hierarchical, male centred society. It raises issues of respecting and exploring the patient’s wishes even when the individual appears disinterested. It also explores the issues of privacy, empathy and caring in the interactions between physicians and patients</p> <p>Examples of Inappropriate and Appropriate Informed Consent Forms</p>	<p>Students deliberations</p> <p>Case presentation</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 74)</p>

Functioning of ERB	<p>Discussion will cover;</p> <p>Mock ERB to review the projects</p>	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Arrange Pre ERB Meeting/students mock ERB to review the projects • Attend ERB Meeting to appreciate the process of review • Attend BASR meeting to appreciate the process of review 	<p>Attending the ERB and BASR Meetings</p>	<p>Assignment to develop an appropriate consent form</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 74)</p>
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Module - V – BASIC BIOETHICS MODULE

Final year MBBS

Premise

Theoretical Component (Integrated Bioethics Methods: IBM-V)

Theme:

This module will cover theoretical teachings of resource allocation, concept of equity and equality, distributive justice, resource allocation and rationing of scarce resources. Concept of Euthanasia in western world and Islamic perspective,

Practical Component (Student Practical Component: SPC-V)

Theme

Ethical principles and procedures for fair allocation; Appropriateness of Rationing as Context Specific, elaboration of ethical perspective involving “best interests”, “advance directives”, “withdrawal or withholding of life support system”, “do not resuscitate (DNR) orders”. Ethical issues in organ donation, patient rights and end-of-life decisions, ethical dilemma involving real life scenario in conflicting situation involving end of life decision. Practical teachings will be done in clinical settings, through real life situations, video demonstration, students deliberations, reflective logs and role plays

Ethics Curriculum Final year MBBS

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Patient rights and end-of-life decisions	<p>Discussion will cover;</p> <ul style="list-style-type: none"> • Salient features of Rights of the Patients developed by the World Medical Association (WMA) • Terminologies related to end of life care • Principles of providing “good death to a terminally ill patient • Effective communication for end of life decisions 	<p>At the end of the session students should be able to;</p> <ul style="list-style-type: none"> • Describe the salient features of Rights of the Patients developed by the World Medical Association (WMA) • Explain the terms “best interests”, “advance directives”, “withdrawal or withholding of life support system”, “do not resuscitate (DNR) orders” and “euthanasia” • Explain the term “good death” and the principles involved in providing “good death to a terminally ill patient”. • Communicate effectively the end-of-life decisions to appropriate persons. 	<p>LGIS 1hr contact session in Parallel classes will be conducted by Senior Faculty from clinical departments</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in Final Prof. MBBS exam.</p>	<p>WMA declaration and national code of ethics</p> <ul style="list-style-type: none"> • Health Ethics in South Asia Volume 4: Teaching health ethics, Resource materials from the WHO SEA Region, WHO SEARO New Delhi 2005 pp: 83-86 • SD Adhikary, R.Raviraj: Do not resuscitate orders: IJME, July-Aug. 2006 and responses: “The team had no options”, “Guiding light at the end of the tunnel’ • WHO Handbook of Medical Ethics: Part 2, Chapter 1 Section F: End of life decisions, Section G: Patients’ rights.
Equity & Social Justice	<p>Discussion will cover;</p> <p>Rationing and allocation of scarce resources</p>	<p>At the end of the session students should be able to;</p> <p>Delineate the concept of rationing and allocation of scarce resources Define Rationing Elaborate the Appropriateness of Rationing according to Context</p>	<p>LGIS 1hr contact session in Parallel classes will be conducted by Senior Faculty from clinical departments</p>	<p>1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination</p> <p>Result / marks obtained will contribute towards Internal assessment (IA) in Final Prof. MBBS exam.</p>	<p>Leslie P. Scheunemann, Douglas B. White, “The ethics and reality of rationing in medicine,” CHEST Journal, vol. 140, no. 6 (2011): 1625-32. Reproduced with permission. The Ethics and Reality of Rationing in Medicine Leslie P. Scheunemann, Douglas B. White</p> <p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 165)</p>

		Principle of appropriate rationing			
Resource allocation in the health-care system	Discussion will cover; Ethical Issues in Resource Allocation, Research, and New Product Development	At the end of the session students should be able to; Issues in the Construction of a Cost-Effectiveness Analysis	LGIS 1hr contact session in Parallel classes will be conducted by Senior Faculty from clinical departments	1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination Result / marks obtained will contribute towards Internal assessment (IA) in Final Prof. MBBS exam.	Dan W. Brock, Daniel Wikler, "Ethical issues in resource allocation, research, and new product development," Disease Control Priorities in Developing Countries, Oxford University Press (2006): 259-60. Reproduced with permission. Ethical Issues in Resource Allocation, Research, and New Product Development Dan W. Brock, Daniel Wikler
Ethics of transplantation/organ donation	Discussion will cover; Ethical issues of transplantation/organ donation	At the end of the session students should be able to; Elaborate the ethical issues in organ donation	LGIS 1hr contact session in Parallel classes will be conducted by Senior Faculty (Assistant professor or Subject Specialist	1 MCQs of level C1 to C3 will cover this session teachings in relevant block examination Result / marks obtained will contribute towards Internal assessment (IA) in Final Prof. MBBS exam.	Jamshed Akhtar, "Ethical issues in voluntary kidney donation," Pakistan Journal of Medical Ethics, (2010): 15-17. Reproduced with permission. Ethical Issues in Voluntary Kidney Donation Jamshed Akhtar

Practical Session-
Time: 120 min each (2hrs)

Theme

Broad topic	Major syllabus with sub-topics	Learning objectives	Teaching strategy	Assessment tools	Suggested reading sources
Patient rights and end-of-life decisions	Discussion will cover; Ethical dilemma on end of life decisions	At the end of the session students should be able to; Analyse how to proceed with end of life decisions • Elucidate how to proceed in matters concerning patients' rights involving end of life decisions	More than meets the eye. http://vimeo.com/51505327 . This teaching video depicts one such situation where a neurosurgeon faces an ethical dilemma regarding the care of a quadriplegic patient with Downs Syndrome who is ventilator dependent but not brain dead.	Students deliberations Assignments	More than meets the eye. http://vimeo.com/51505327 Alan Meisel, "End-of-life care," in From Birth to Death and Bench to Clinic: The Hastings Center Bioethics Briefing Book for Journalists, Policymakers, and Campaigns, ed. Mary Crowley, (2008): 51-54. Reproduced with permission.

organ donation and transplantation	<p>Discussion will cover;</p> <p>Legal and ethical perspective involving organ transplant</p> <p>Pakistan Transplant Law regarding organ donation and transplantation</p>	<p>At the end of the session students should be able to;</p> <p>Explicate the matters involving ethical and legislative issues concerning organ transplant</p>	<p>Clinical case based scenarios</p> <p>Role plays</p>	<p>Students deliberations</p> <p>Assignments to be upload on LMS</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 108)</p>
End of life decision	<p>Discussion will cover;</p> <p>Real life scenario on end of life decisions</p>	<p>At the end of the session students should be able to;</p> <p>Critically evaluate how to proceed on ethical dilemma involving real life scenario</p>	<p>Clinical case based scenarios</p>	<p>Students deliberations</p> <p>Reflective writing</p> <p>Maintaining reflective logs</p>	<p>http://nbcPakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 238)</p>

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