

CURRICULUM



DIPLOMA IN CHILD HEALTH (D.C.H)

DEPARTMENT OF PEADIATRICS MEDICINE

Peoples University of Medical & Health Sciences,
Nawabshah, Sindh.

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CONTRIBUTOR

- PROFESSOR ALI AKBAR SIYAL

INTRODUCTION

Paediatrics Department at PUMHSW is 100 bedded hospitals. This Department is looking after about 10,000 indoor children and 50,000 outdoor children.

It is training about 40 post graduate students in pediatrics diplomas and degree course. Department is first to start Pre service IMNCI in EMRO region. It is also training health care personnel in IMNCI, ENC and other child survival programs. It has held successful national pediatrics conference in 2007 on the platform of Pakistan Paediatrics Association. It continues to be held yearly, research symposia and CME seminars are also conducted.

The mission of degree program for pediatrics is to develop pediatricians having sound knowledge, clinical and teaching skills and having managerial decision making abilities to work at teaching institutions, district hospitals and community health care planning causes, They will be able to become paediatrics consultant and teacher to teach, train and evaluate undergraduate and post graduate medical students. He will be able to design and conduct research projects.

MISSION

The mission of People's University of Medical & Health Sciences for Women, in health professional education and research is to educate and train post graduate students of medical and health care sciences in accordance with highest professional standards and ethical values and to meet the healthcare needs of the community through dissemination of knowledge and service.

AIMS

- To provide postgraduate students with a strong knowledge which can be easily and appropriately applied on patients management in the community & small hospitals.
- To provide family health care for the children
- To provide opportunities for the acquisition of competence in managing acute pediatrics emergencies and proper management of referred patients.
- To develop competence for in the inpatient and out patient management of chronic illness.
- To teach the problem solving and laboratory data analyzing capabilities.
- To encourage in development of collaboration with community in order to improve public health / community paediatric.
- To develop communication and counseling skills for the patient management.
- To reinforce self learning and commitment to continued updating in all aspects of pediatrics.

GOAL/OUTCOME

Goal is to produce a competent Pediatrician who is able to apply the knowledge and skills in managing & preventing diseases in and improving status of health in children. His/her competency is equal to or more than the equivalent degrees awarded to Pediatrician nationally or internationally.

OBJECTIVES

- To provide postgraduate students with a strong knowledge which can be easily and appropriately applied on patients management in the hospital as well as in the community
- To educate the postgraduate students to take history to formulate provisional or differential diagnosis.

- To provide opportunities for the acquisition of competence in managing acute pediatrics emergencies and proper management of referred patients.
- To develop competence for in the inpatient and out patient management of chronic illness.
- To teach the problem solving and laboratory data analyzing capabilities.
- To encourage in development of collaboration with community in order to improve public health / community pediatric.
- To develop communication and counseling skills for the patient management.
- To reinforce self learning and commitment to continued updating in all aspects of pediatrics.

SPECIFIC OBJECTIVES

BASIC CLINICAL SKILLS

- Obtains pertinent history.
- Perform physical examination correctly.
- Formulates a working diagnosis.
- Decides whether the patient requires :
 - Ambulatory care or hospitalization.
 - Referral to other health professionals.

EXPERT MANAGEMENT

- Plans an enquiry strategy i.e. order appropriate investigations and interprets their results to decide and implements suitable treatment.
- Maintains follow up of patients at required intervals and maintains records of patients.
- Establishes positive relationship with all patients in order to ease illness and suffering.
- Demonstrate sensitivity in performing internal examination.

CONTINUED MEDICAL EDUCATION (CME)

- Acquire new Information, assess its utility and make appropriate applications to facilitate the transfer of important information related to the management and prevention of disease.
- To reinforce self-learning and commitment to continued updating in all aspects of pediatrics, Demonstrate flexibility and willingness to adjust appropriately to changing circumstances and foster the habit and principle of self-education and reflection in order to constantly update and refresh knowledge and skills and as a commitment to continuing education.

COMMUNITY PEDIATRICS

- Participates in workshops and health education programs in the community and understand the social and governmental aspects of health care provision.
- Offer professional services while keeping the cost effectiveness of individual forms of care and apply an understanding of community-based recourse available for patients and care givers in rural areas.
- Handle complaints including self-criticism by colleagues or patients and understand the importance of obtaining and valuing a second opinion.
- Implement national policies in preventive and health promotion of children

EDUCATIONAL STRATEGIES ADOPTED UNDER SPICES MODEL FOR CURRICULUM PLANNING:

- Student-centered
- Problem-solving
- Specialty (discipline) based
- More Community based than Hospital-based
- Elective as well apprenticeship
- Systematic-planned for
 - 1) Theoretical knowledge
 - 2) Practical and clinical skills
 - 3) Writing thesis/Research articles
 - 4) Publishing scientific articles in accredited journals.
 - 5) Improving attitudes including communication skills.
 - 6) Training in research methodology, medical ethics

TRAINING PROGRAM

DCH training program in Paediatrics is of two years duration.

ELIGIBILITY REQUIREMENTS FOR ENTERING THE TRAINING PROGRAMME

- MBBS or equivalent qualification registered with PMDC
- One-year house job in an institution recognized by the LUMHS or PMDC.
- Passed entry test.

ENROLMENT

On selection for the course of DCH, the PG students are required to get themselves enrolled to the Liaquat University of Medical and Health Sciences

REGISTRATION

On commencement of training all trainees are required to register themselves compulsorily with the Post graduate institute LUMHS.

COMPONENTS OF DCH TRAINING:

- General Paediatrics 14 month
- Neonatology 03month
- Emergency/casualty work 03 month
- Preventive, social and community work: 04 month

PREVENTIVE, SOCIAL AND COMMUNITY WORK INCLUDES

- Breast feeding promotion and lactation
- Immunization
- Diarrhea disease management
- ARI management
- Growth monitoring and evaluation
- Nutritional assessment and management
- Disability management and exposure to special educational institution

LOGBOOK

The logbooks will be issued to candidates by the LUMHS after their selection for training.

GUIDELINES FOR TRAINEES:

- The logbook is intended for documenting all the activities performed by the trainee during the training period.
- Entries must commence from the start of the training program.
- Trainees are advised to make the required entries on the day of the event.
- Completed and duly certified logbook is one of the requirements for appearing in MD examination.

GUIDELINES FOR SUPERVISORS

- The logbook is a day to day record of the clinical and academic work done by the trainee.

- The purpose is to assess the overall training of the candidate and to determine deficiencies if any so that may be corrected.
- The supervisor or any other designated trainer (Consultant/Professor/Associate Professor/Assistant Professor.) who is capable of testing the competence of the trainer in the specified area should ascertain that, the entries in the logbook are complete in all aspects. They should then certify the accomplishment of desired competency by signing in the appropriate column soon after the activity is conducted.
- The head of the unit shall authenticate the entries by signing the certificate. It is suggested that the heads of the unit check the log books at least once a month, so that they can spot any deficiencies or otherwise in the training (e.g the trainee has not rotated through a subspecialty which he/she should have).

MANDATORY WORKSHOPS

1. Computer and Internet Orientation
2. Integrated Management of Neonatal & Child hood Illness (IMNCI) training program
3. Management of Malnutrition (CMAM/SAM)
4. Essential New born Care Course (ENCC)
5. Basic Life Support / Advance Life Support (BLS/ALS)

TEACHING METHODOLOGY

The program training modes will include:

- Theoretical sessions
- Practical sessions
- Clinical sessions
- Self learning and assignments

Venue of training will be at indoor facility, outdoor facility and community

The objectives of the training may be achieved through

- Ward duties
- Emergency duties
- OPD duties
- Morbidity / mortality review meetings
- Case presentation
- Presentation of scheduled topic

- Clinico pathological conferences
- Journal club
- Seminars, conferences and lectures

MONTHLY TRAINING PROGRAM

- Lecture / Tutorials (PBL) 1 hour X 4
- Case Discussion 1hour X 4
- X-Ray C T 1 hour X 4
- CPC 1 hour X 4
- Mortality meeting 1 hour
- Ward rounds 2 hours X 28

Lecture arranged by invited speakers from others specialties.

- Radiology.
- Child psychiatry.
- Dermatology.
- Cardiology.
- Heamatology/ pathology.

SYLLABUS

Components of DCH training in Pediatrics:

- General Pediatrics 18 months
- Neonatology 03months
- Outdoor / Community 03months

NEONATOLOGY

In Neonatology the focus has been given on new born examination and diseases related to newborn babies. In this duration the postgraduates will perform emergency duties in Neonatology ward and case presentations and examination classes will also be done from neonatology. Following are important topics.

- Neonatal mortality rate in Pakistan and its causes
- Essential care of newborn (ENC)
- Small baby (preterm / low birth weight / small for dates)
- Sepsis
- Birth asphyxia,
- Resuscitation of newborn,
- Birth trauma
- Neonatal jaundice
- Neonatal Seizures
- Bleeding / hematological problems
- Congenital malformations
- Neonatal intensive care, esp
 - i. Fluids
 - ii. Feeding
 - iii. Respiratory distress
 - iv. Thermo-neutral environment
- Young infant IMNCI

ASSESSMENT

Assessment includes

Formative assessment: will be done during training course by:

- Competency level assessment
- Record of candidates daily activity in the logbook.

Summative assessment will be done at the end of training in the form of final examination

ELEGIBILITY REQUIREMENTS FOR EXAMINATION OF DCH

- Two years specified training in paediatric according to the schedule given above.
- Certificate from the supervisor testifying training in the required areas for specified periods.
- Completed and duly attested logbook.
- Certificate of attendance of mandatory workshops.

EXAMINATION SCHEDULE

- The DCH theory examination will be held twice a year.
- Examinations will be conducted at LUMHS
- English shall be the medium of examination for the Theory /Practical /Clinical / OSPE and Viva examinations

THE UNIVERSITY IS AUTHORIZED TO CHANGE THE DATES AND FORMAT OF THE EXAMINATION.

- A competent authority appointed by the LUMHS has the power to
- Debar any candidate from any examination if it is satisfied that such a candidate is not a fit person to take the university examination, because of using unfair means in the examination, misconduct or other disciplinary reason.
- Each successful candidate in the DCH examination shall be entitled to the award of diploma degree by university.

- Applications along with the prescribed examination fees and required documents must be submitted by the last date notified for this purpose before each examination.
- Details of examination fee shall be notified before each examination.

FORMAT OF EXAMINATIONS

DCH examination comprises of two parts:

1. THEORY EXAMINATION.

This is a written examination consisting of TWO papers.

Paper-I	75 BCQs	Single Best	100 Marks
Paper-II	10 Short essay questions (SEQs)		100 Marks

Candidate has to secure a minimum of 50% marks in each component and an aggregate of 55% to pass theory examination.

2. PART II CLINICAL/ PRACTICAL EXAMINATION.

The clinical section comprises two components:

The clinical Examination consisting of the long case and short cases .

OSCE / Viva voce

FORMAT OF LONG CASE EXAMINATION

Each candidate will be allotted one long case and allowed 40 minutes for history taking and clinical examination. Candidates should take a careful history from the patient (or relative) and after a thorough physical examination to identify the problems, which the patient presents with. In this section the candidates will be assessed on the following areas.

- Introduces one self.
- Takes informed consent
- Listens patiently and is polite with the patient.
- Is able to extract relevant information.
- Uses correct clinical methods systematically (including appropriate exposure and re-draping).
- Presents skillfully
- Gives correct findings

- Gives logical interpretations of findings and discusses differential diagnosis.
- Enumerates and justifies relevant investigations.
- Outlines and justifies treatment plan , including rehabilitation.
- Discusses prevention and prognosis.
- Has knowledge of recent advance relevant to the case.

FORMAT OF SHORT CASE EXAMINATION

Candidates will be examined in at least four short casers for a total of 40 minutes jointly by a pair of examiners. Candidates will be given a specific task to perform on patients, one case at a time. During that part of the examination, the candidate will be assessed in:

- Takes informed consent.
- Uses current clinical methods including appropriate exposure.
- Examines systematically
- Discussion.
- Gives correct findings.
- Gives logical interpretations of findings.
- Justifies diagnosis/ differential diagnosis.

Note: As the time for this section is short, the answers given by the candidates should be precise, and relevant to the patient under discussion.

OSCE / VIVA

There will be 10 to 15 OSCE Stations including Viva voce.50% weightage will be given to interactive & performance stations and 50% weightage will be for static stations.

Total marks of DCH	200 Marks
Long case	60 Marks.
Short case	80 Marks
OSPE / Viva	60 Marks

To become successful in the examination the candidate must has to score minimum 50% in each components with total aggregate should not be less than 60%.

DIPLOMA IN CHILD HEALTH (DCH)
TABLE OF SPECIFICATION (TOS)

Paper-I 75 BCQs Single Best 100 Marks
Paper-II 10 Short essay questions (SEQs) 100 Marks

CONTENT	Recall C1	Interpretations C2	Problem Solving C3	Total Number of Single best Questions	Percentage %
<p>NEONATOLOGY</p> <p>Neonatal mortality rate in Pakistan and its causes</p> <ol style="list-style-type: none"> 1. Small baby (preterm / low birth weight / small for dates) 2. Sepsis 3. Birth asphyxia, resuscitation 4. Essential care of newborn (ENC) 5. Neonatal jaundice 6. Convulsion 7. Bleeding / hematological problems 8. Congenital malformations 9. Young infant IMNCI 	04	08	06	18	24
<p>NATIONAL PROGRAMS</p> <ol style="list-style-type: none"> 1. Under 5 mortality rate and infant mortality rate in Pakistan , causes and achieving MDG 4 2. MNCH (IMNCI) 3. EPI & NON EPI Vaccines 4. IYCF/CMAM / SAM 4. Micronutrient Initiative 5. Malaria Guidelines 6. Tuberculosis Guidelines 7. National guidelines on child rights 	03	03	02	08	10

EMERGENCY PAEDIATRICS 1. B.L.S 2. Shock 3. Coma, Convulsions 3. Emergency triage 4. Neonatal Resuscitation 5. Encephalopathies 6. Acute Asthma 7. Foreign Body	01	02	02	05	07
RESPIRATORY SYSTEM 1. Cough or difficult breathing a. Pneumonia b. Asthma c. Croup d. Throat problem 2. Pleural effusion 3. Pneumo-thorax 4. Cystic fibrosis 5. Tuberculosis 6. Pulmonary Function tests 4. Respiratory failure	01	02	02	05	07
GASTRO INTESTINAL SYSTEM AND LIVER 1- Diarrhea a. Acute diarrhea b. Persistent diarrhea c. Dysenteries d. WHO management plans A,B and C 2. Abdominal pain 5. Constipation 6. Celiac disease	01	02	02	05	07

<p>LIVER</p> <ol style="list-style-type: none"> 1. Infectious Hepatitis A, B, C, D, E 2. Hepatic Encephalopathy 3. Chronic liver disease 4. Liver abscess 5. Wilson Disease 	01	02	02	05	07
<p>CNS</p> <p>Lethargic or unconscious child D/D and management</p> <ol style="list-style-type: none"> 1. Convulsions and coma 2. Meningitis / encephalitis / cerebral malaria. 3. Cerebral palsy 4. Developmental delay 5. Space occupying lesion (brain abscess and brain tumor) 6. Epilepsy 					
<p>CARDIO VASCULAR SYSTEM</p> <ol style="list-style-type: none"> 1. A cyanotic heart diseases (VSD, ASD, PDA) 2. Cyanotic congenital heart disease (TGA, TOF) 3. Management of cardiac failure 4. Myocarditis 5. Infective endocarditis 6. Rheumatic fever 	01	02	02	05	07
<p>INFECTIOUS DISEASES</p> <p>Approach to child with fever</p> <ol style="list-style-type: none"> 1. EPI Target Disease <ol style="list-style-type: none"> a. Poliomyelitis b. Childhood Tuberculosis 	01	02	02	05	06

<ul style="list-style-type: none"> c. Diphtheria d. Pertusis(whooping cough) e. Tetanus and Neonatal Tetanus f. Hib (Pneumonia and Meningitis) g.. Measles h. Hepatitis B <p>2. Non – EPI target Diseases</p> <ul style="list-style-type: none"> a. Pneumonia and meningitis (Pneumococcal Vaccine) b. Enteric fever c.. Chicken pox d. Rota virus diarrhea e. Influenza Virus f.. Measles, Mumps and Rubella (MMR) g. Hepatitis A h. Cervical cancer <p>3. Vaccine Research</p> <ul style="list-style-type: none"> a. Malaria b. HIV c. Hepatitis C 					
<p>RENAL DISEASE / NEPHROLOGY</p> <p>Approach to child with edema and haematuria</p> <ul style="list-style-type: none"> 1. Urinary infections 2. Nephrotic syndrome 3. Acute Glomerulonephritis 4. Acute Renal failure 5. Chronic kidney disease 6. Hyper tension 	01	02	02	05	06
<p>HEMATOLOGICAL DISEASES</p> <p>Approach to child with palmar pallor</p> <ul style="list-style-type: none"> 1. Anemia iron deficiency and others 2. Hemolytic especially thalassemia 	01	01	01	03	05

<p>3. I.T.P, Platelet and bleeding disorder, Von Willebrand Disease</p> <p>4. Coagulation disorders Hemophilia</p> <p>5. Aplastic Anemia</p> <p>6. Neutromenia and Neutrophilia</p>		01		01	01
<p>ONCOLOGY</p> <p>Leukemia</p> <p>Lymphoma</p> <p>Neuroblastoma</p> <p>Brain Tumours</p> <p>Wilms' tumour</p> <p>Liver Tumours</p>					
<p>NUTRITION</p> <p>1. Breast feeding (ENC/ IYCF), infant nutrition(IYCF), growth monitoring</p> <p>2. Classification of malnutrition according to CMAM</p> <p>3. SAM, Underweight, Marasmus , Kwashiorkor</p> <p>4. Chronic malnutrition ,short stature</p> <p>5. Micronutrients</p> <p>a. Rickets</p> <p>b. Vitamin A deficiency,</p> <p>c. Zinc</p>	01	02	02	05	07
<p>GENETICS AND CHROMOSOMAL DISORDERS</p> <p>Pattern of inheritance</p> <p>Genetic Counseling</p> <p>1. Down's Syndrome</p> <p>2. Turner's syndrome</p> <p>3. Klienfelters' Syndrome</p>		01		01	01

ENDOCRINES Diabetes mellitus Hypothyroidism Short Stature Precocious Puberty Adrenal Disorders Parathyroid Hormone		02		02	03
CONNECTIVE TISSUES DISORDERS 1. Rheumatoid arthritis 2. Systemic lupus erythmatis 3. Kawasaki disease		01		01	
MISCELLANEOUS 1. Common behavioral problems in children. 2. Poisoning a. Kerosene oil b. Organophosphorus		01		01	01