

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY
No. 69, ANNA SALAI, GUINDY, CHENNAI – 600 032.

M.D. / M.S.
POST GRADUATE DEGREE COURSES



SYLLABUS AND CURRICULUM
2021 - 2022

**M.D. DERMATOLOGY, VENEROLOGY
AND LEPROSY**

THE TAMIL NADU Dr. M.G.R MEDICAL UNIVERSITY, CHENNAI

M.D. DERMATOLOGY, VENEROLOGY AND LEPROSY

1. GOALS

The goals of postgraduate training course would be to train a MBBS doctor who will:

- To practice Dermatology, Venereology and Leprosy efficiently and effectively, backed by scientific knowledge, skill base, ethics and tenets of good medical practice.
- Recognize the economic costs of treatment and use the most effective therapy within the available economic resources.
- Communicate to patients and families the advantage of preventive as well as the importance of compliance to prescribed therapies.
- Be able to co-operate, collaborate with colleagues and contribute to the management, when the problem is a multi-system disease process.

2. OBJECTIVES

1. Knowledge (Cognitive domain)
2. Skills (Psycho motor domain)
3. Behavior: Affective domain: Human values, Ethical practice and Communication,
4. Partnership, Leadership and Teamwork abilities
5. Safety and quality
6. Maintaining trust

Knowledge:

- Attain cognitive proficiency in the diagnosis and management of dermatological conditions, sexually transmitted diseases and leprosy through a patient oriented structured curriculum.
- Describe the etiology, pathogenesis, clinical features, prognosis, differential diagnosis and treatment of diseases relevant to DVL.
- Demonstrate understanding of basic sciences relevant to the specialty and its application.

- Attain adequate knowledge in the clinical management of Sexually Transmitted Diseases and Infections (STDs & STIs) including HIV, surveillance and reporting, prevention of morbidity and mortality due to STDs and HIV by initiating treatment, partner notification and behavioral change. To know the importance of early diagnosis, prevention and transmission, management of long term risks of STDs including HIV.
- Attain knowledge about various sexual dysfunctions in both male and female and their management.
- Attain adequate knowledge about the importance of other departments like microbiology, obstetrics and gynecology, forensic medicine, medicine, public health and psychiatry.
- Attain knowledge about the care and support of male, female, transgender individuals of all age groups especially sexually active people, and vulnerable groups like drug abusers, sex workers etc.,
- Ability to teach and train different persons from undergraduate students, health care workers and community about STDs and STIs including HIV.
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- Attain adequate knowledge of management of patients through a “work-based, hands-on” curriculum which entails 1) supervised management of patients,2) ward duties,3) 24 hour “on-call duties” which requires one to attend dermatological emergencies.
- Attain adequate knowledge of management of complex dermatology problems by attending consultations from other specialties,and attending multidisciplinary clinics and meetings.
- Describe methods, indications, and interpretation of common Dermatology, Venereology and Leprosy laboratory procedures.
- Describe method, indications, contraindications and complications of common dermatosurgical and cosmetic procedures, phototherapy, patch tests, Lasers, and injectables.
- Demonstrate adequate knowledge of acquiring consent prior to performing procedures and taking clinical photographs.
- Identify social and economic determinants in a given case, and take them into account for planning therapeutic measures
- Recognize conditions that may be outside the area of his specialty/competence and to refer them to the appropriate specialist.

1 **Skills:**

- Record the patient's history in a structured format that benefits the patient and allows the physician to arrive at a diagnosis. This applies to both out-patient and in-patient setting with emphasis on patient confidentiality and effective time management (OPD setting).
- Perform a structured clinical examination of patients with Dermatology, Venereology and Leprosy related problems taking into account the specific systems that need to be examined in patients with Leprosy and Venereology related problems. Document clinical findings using acceptable terminology (relevant to DVL) in a structured manner.
- Document in- patient problems in a problem sheet with the management and discharge plan.
- Document progress, treatment, complications and the intervention strategies adopted in the care of in- patients.
- Provide treatment according to available best clinical evidence keeping in mind the economic impact of treatment on the patient.
- Perform and interpret results of common laboratory and other procedures relevant to Dermatology, Venereology and Leprosy.
- Interpret the histopathological features of benign and malignant diseases relevant to Dermatology, Venereology and Leprosy.
- Perform common dermatosurgical procedures in a safe and sterile environment.
- Provide basic and advanced life saving support services (BLS) in emergency situations
- Safety and Quality:

Contribute to the safety of patients, self and community:

1. Regular audits of patient records, treatment administered, and guidelines followed
2. Report suspected adverse drug reactions
3. Report adverse event occurring during surgical and other procedures
4. Report needle stick injury and spills
5. External quality check of procedures done in the laboratory
6. Proper disposal of hospital wastes

- Affective Domain: Human values, Ethical practice and Communication, Partnership, Leadership and Teamwork abilities
- Adopt ethical principles in all aspects of his/her practice.
- Be aware of personal prejudices and judgmental attitude when confronted with diseases such as HIV, STDs, and leprosy. One should be able to deal with these positively through self-reflection or counselling.
- Develop communication skills, in particular the skill to explain various options available in management and to obtain a true informed consent from the patient.
- Develop partnership, leadership and teamwork abilities with colleagues, subordinates and others in the departments and in the community.
- Apply ethical standards while carrying out human or animal research.
- Recognize limitations in his knowledge and skill and refer to more competent colleagues, when needed.
- Observe professional decorum regarding comments on diagnostic or management practices of professional colleagues.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

Maintaining trust

Maintaining trust with patients.

Maintaining confidentiality and concern about the community in managing the various diseases of his/her speciality.

Application of the best of his/her knowledge for the well- being of the patient/community.

3. COMPONENTS OF THE POST GRADUATE CURRICULUM

- Theoretical Knowledge
- Practical and Clinical Skills
- Writing Thesis/Research Articles
- Attitudes including Communication Skills
- Training in Research Methodology, Medical Ethics /Bioethics and Medicolegal aspects

Students should compulsorily attend the research Methodology workshop conducted by the University within first six months of the M.D course.

Students are encouraged to attend workshops/CME's on Bioethics conducted by the University and other reputed Institutions.

Medical ethics, bioethics, moral and legal issues and medical audit are part and parcel of the curriculum and syllabus.

4. THEORY SYLLABUS

(Source: ROOK'S TEXT BOOK OF DERMATOLOGY
Volume 1-4, Ninth Edition, 2016 Edited by – Christopher Griffiths, Jonathan Barker, Tanya Bleiker, Robert Chalmers, Daniel Creamer)

1. History of Dermatology
2. Structure and Function of the Skin
3. Histopathology of the Skin: General Principles
4. Diagnosis of Skin Disease
5. Epidemiology of Skin Disease
6. Health Economics and Skin Disease
7. Genetics and the Skin
8. Inflammation, Immunology and Allergy
9. Photobiology
10. Cutaneous Response to Injury and Wound Healing
11. Psychological and Social Impact of Long-term Dermatological
12. Adverse Immunological Reactions to Drugs
13. Topical Drug Delivery
14. Clinical Pharmacology
15. Principles of Holistic Management of Skin Disease
16. Principles of Measurement and Assessment in Dermatology
17. Principles of Evidence-based Dermatology
18. Principles of Topical Therapy
19. Principles of Systemic Therapy
20. Principles of Skin Surgery
21. Principles of Phototherapy
22. Principles of Photodynamic Therapy
23. Principles of Cutaneous Laser Therapy
24. Principles of Radiotherapy
25. Viral Infections
26. Bacterial Infections
27. Mycobacterial Infections

- 28.HIV and the Skin
- 29.Fungal Infections
- 30.Parasitic Diseases
- 31.Arthropods
- 32.Psoriasis and Related Disorders
- 33.Pityriasis Rubra Pilaris
- 34.Lichen Planus and Lichenoid Disorders
- 35.Graft-versus-host Disease
- 36.Eczematous Disorders
- 37.Seborrhoeic Dermatitis
- 38.Atopic Eczema
- 39.Urticaria
- 40.Recurrent Angio-oedema without Weals
- 41.Urticarial Vasculitis
- 42.Autoinflammatory Diseases Presenting in the Skin
- 43.Mastocytosis
- 44.Reactive Inflammatory Erythemas
- 45.Adamantiades–BehcetDisease
- 46.NeutrophilicDermatoses
- 47.Immunobullous Diseases
- 48.Lupus Erythematosus
- 49.Antiphospholipid Syndrome
- 50.Dermatomyositis
- 51.Mixed Connective Tissue Disease
- 52.Dermatological Manifestations of Rheumatoid Disease
- 53.Systemic Sclerosis
- 54.Morphoea and Allied Scarring and Sclerosing InflammatoryDermatoses
55. Cutaneous Amyloidoses
56. Cutaneous Mucinoses
57. Cutaneous Porphyrias
58. Calcificationof the Skin and Subcutaneous Tissue
59. Xanthomas and Abnormalities of Lipid Metabolism and Storage
60. Nutritional Disorders Affecting the Skin
61. Skin Disorders in Diabetes Mellitus

62. Inherited Disorders of Cornification
63. Inherited Acantholytic Disorders
64. Ectodermal Dysplasias
65. Inherited Hair Disorders
66. Genetic Defects of Nails and Nail Growth
67. Genetic Disorders of Pigmentation
68. Genetic Blistering Diseases
69. Genetic Disorders of Collagen, Elastin and Dermal Matrix
70. Disorders Affecting Cutaneous Vasculature
71. Genetic Disorders of Adipose Tissue
72. Congenital Naevi and Other Developmental Abnormalities Affecting the Skin
73. Chromosomal Disorders
74. Poikiloderma Syndromes
75. DNA Repair Disorders with Cutaneous Features
76. Syndromes with Premature Ageing
77. Hamartoneoplastic Syndromes
78. Inherited Metabolic Diseases
79. Inherited Immunodeficiency
80. Pruritus, Prurigo and Lichen Simplex
81. Mucocutaneous Pain Syndromes
82. Neurological Conditions Affecting the Skin
83. Psychodermatology and Psychocutaneous Disease
84. Acquired Disorders of Epidermal Keratinization
85. Acquired Pigmentary Disorders
86. Acquired Disorders of Hair
87. Acne
88. Rosacea
89. Hidradenitis Suppurativa
90. Other Acquired Disorders of the Pilo-sebaceous Unit
91. Disorders of the Sweat Glands
92. Acquired Disorders of the Nails and Nail Unit
93. Acquired Disorders of Dermal Connective Tissue
94. Granulomatous Disorders of the Skin
95. Sarcoidosis

96. Panniculitis
97. Other Acquired Disorders of Subcutaneous Fat
98. Vascular Disorders Involving the Skin
99. Purpura
100. Cutaneous Vasculitis
101. Dermatoses Resulting from Disorders of the Veins and Arteries
102. Ulceration Resulting from Disorders of the Veins and Arteries
103. Disorders of the Lymphatic Vessels
104. Flushing and Blushing
105. Dermatoses of the Scalp
106. Dermatoses of the External Ear
107. Dermatoses of the Eye, Eyelids and Eyebrows
108. Dermatoses of the Oral Cavity and Lips
109. Dermatoses of the Male Genitalia
110. Dermatoses of the Female Genitalia
111. Dermatoses of Perineal and Perianal Skin
112. Cutaneous Complications of Stomas and Fistulae
113. Dermatoses of Pregnancy
114. Dermatoses of the Neonate
115. Dermatoses and Haemangiomas of Infancy
116. Benign Cutaneous Adverse Reactions to Drugs
117. Severe Cutaneous Adverse Reactions to Drugs
118. Cutaneous Side Effects of Chemotherapy and Radiotherapy
119. Dermatoses Induced by Illicit Drugs
120. Dermatological Manifestations of Metal Poisoning
121. Mechanical Injury to the Skin
122. Pressure Injury and Pressure Ulcers
123. Cutaneous Reactions to Cold and Heat
124. Burns and Heat Injury
125. Cutaneous Photosensitivity Diseases
126. Allergic Contact Dermatitis
127. Irritant Contact Dermatitis
128. Occupational Dermatology
129. Stings and Bites

130. Benign Melanocytic Proliferations and Melanocytic Naevi
131. Benign Keratinocytic Acanthomas and Proliferations
132. Cutaneous Cysts
133. Lymphocytic Infiltrates
134. Cutaneous Histiocytoses
135. Soft tissue Tumours and Tumour-like Conditions
136. Tumours of Skin Appendages
137. Kaposi Sarcoma
138. Cutaneous Lymphomas
139. Basal Cell Carcinoma
140. Squamous Cell Carcinoma and its Precursors
141. Melanoma
- Melanoma Clinicopathology
- Systemic Treatment of Melanoma
142. Dermoscopy of Melanoma and Naevi
143. Merkel Cell Carcinoma
144. Skin Cancer in the Immunocompromised Patient
145. Cutaneous Markers of Internal Malignancy
146. The Skin and Disorders of the Haematopoietic and Immune Systems
147. The Skin and Endocrine Disorders
148. The Skin and Disorders of the Heart
149. The Skin and Disorders of the Respiratory System
150. The Skin and Disorders of the Digestive System
151. The Skin and Disorders of the Kidney and Urinary Tract
152. The Skin and Disorders of the Musculoskeletal System
153. Skin Ageing
154. Cosmeceuticals
155. Anatomy and approach in dermatologic surgery
(Fitzpatrick text book edition 9 Volume 1 & 2, 2019,
Editors - Sewon Kang, Masayuki Amagai, Anna L. Bruckner, Alexander H. Enk, David J. Margolis, Amy J. McMichael, Jeffrey S. Orringer
156. Cryosurgery and electrosurgery
157. Nail surgery
158. Hair transplantation and alopecia reduction

Sexually Transmitted Infections

(Source:SEXUALLY TRANSMITTED INFECTIONS 2nd edition

Editors: Dr. Somesh Gupta&Bhushan Kumar)

1. Historical aspects of Sexually Transmitted Infections
2. Global Epidemiology of Sexually Transmitted infections
3. Global Epidemiology of HIV infection
4. Sexual Behaviour and Sexually Transmitted infections
5. Prevention strategies for the control of sexually transmitted infections
6. Behavioral and counseling aspects of sexually transmitted infections (Including HIV)
7. Condoms and other Barrier methods of STI and HIV prevention
8. Prevention of HIV and other Sexually Transmitted Infections: Male circumcision
9. Microbicides for prevention of Sexually Transmitted Infections
10. Vaccines for Sexually Transmissible infections
11. Vaccines for HIV
12. Partner Notification for Sexually Transmitted Diseases
13. Implementation of STI programs
14. Monitoring and Evaluating Sexually Transmitted Infection Control Programs
15. Anatomy of the Male Genital Tract
16. Anatomy of the Female Genital Tract
17. Normal Genital Flora
18. History and Physical examination
19. Genital Mucosal Immunity Against Sexually Transmitted Infections
20. Laboratory Diagnosis of Sexually Transmitted Infections
21. Rapid tests for the Detection of Sexually Transmitted infections
22. Genital herpes simplex infections
23. Anogenital Human Papillomavirus infection: Natural History: Epidemiology, and vaccination
24. Anogenital Warts, Intraepithelial Neoplasia and their clinical management
25. Molluscum Contagiosum
26. Hepatitis Viruses
27. Human Cytomegalovirus infection
28. Epstein-Barr Virus Infections
29. Kaposi Sarcoma Herpesvirus
30. Infectious Syphilis
31. Late Syphilis

32. Endemic Treponematoses
33. Gonococcal Infections
34. Chlamydia Trachomatis Infections
35. Lymphogranuloma Venereum
36. Chancroid
37. Donovanosis
38. Bacterial Vaginosis
39. Pelvic Inflammatory disease
40. Genital Mycoplasmas
41. Sexually Transmitted Anorectal Infections and Enteric Bacterial Infections
42. Genital Candidal Infections
43. Trichomonas vaginalis Infections
44. Intestinal Protozoa
45. The syndromic approach for the management of STIs: An overview
46. Genital Ulcer-Adenopathy syndrome
47. Urethral Discharge
48. Epididymitis and Epididymo-orchitis
49. Abnormal Vaginal Discharge: Syndromic management
50. Syndromic Management of Lower Abdominal pain in women
51. Inguinal and Femoral Bubo
52. Vulvar Vestibulitis Syndrome
53. Male Genital pain syndromes
54. Ocular Manifestations of Sexually transmitted infections
55. Arthritis associated with sexually transmitted infections
56. Human Immunodeficiency Virus: Biology and Natural history of infections
57. HIV Diagnosis
58. Pharmacology of Antiretroviral Drugs
59. Surrogate Markers of Antiretroviral Efficacy
60. Antiretroviral Drugs for HIV Prevention
61. Acute HIV infection
62. Opportunistic Infections
63. Mucocutaneous Manifestations of HIV
64. Pulmonary Manifestations of HIV Disease
65. Neurological Manifestations of HIV

66. Gastrointestinal Manifestations of HIV Infections and AIDS
67. Renal Manifestations of HIV Infection and AIDS
68. HIV and Endocrine Manifestations
69. AIDS Associated Malignancies and their treatment
70. Rheumatic Manifestations of HIV and AIDS
71. Cardiac Involvement in HIV Infection/AIDS
72. Ocular Manifestations of HIV Infection and AIDS
73. Sexually Transmitted Infections in HIV-Infected Patients
74. Human Immunodeficiency Virus infection in women
75. HIV in children
76. HIV infection in Homosexual Men
77. HIV in blood and blood product recipients
78. HIV in Injection and other drugs users
79. Sexually transmitted infections and pregnancy
80. Sexually Transmitted infections in Neonates and Infants
81. Congenital Syphilis
82. Sexually Transmitted Infections and Infertility
83. Aging. Sexual Behavior, and HIV/STI Risk
84. Sexually Transmitted infections in the Female Sex Worker Community
85. Sexually Transmitted Infections Associated with Sexual Assault
86. Sexual Health of Migrant Populations
87. Human Sexuality
88. Homosexuality, Bisexuality and Sexual Orientation
89. Sexually Transmitted Infections among women who have Sex with Women
90. Sexually Transmitted Infections in Transgender
91. Sexual Abuse in Children
92. Male Sexual Dysfunction
93. Women's Sexual Dysfunction
94. Sexuality Education for Young People
95. Dhat Syndrome: A Culture Bound Sex Related disorder in Indian Subcontinent
96. Clinical Services for Sexually Transmitted Infections and HIV
97. Medicolegal Aspects of Sexually Transmitted Infections and Sexual Assault
98. Sexually Transmitted Infections: Screening and Diagnostic Practices
99. Sexually Transmitted Infections Related Genital Neoplasias

100. HIV, Sexually Transmitted Infections, and Human Right
101. Animal Models of Sexually Transmitted Infections Guidelines for the Treatment of HIV and AIDS in Resource Limited Countries
102. Guidelines for Prevention of Perinatal HIV Infection
103. Guidelines for the Management of HIV-Associated opportunities Infections

Leprosy

(Source: IAL TEXT BOOK OF LEPROSY

Editors: Dr. Bhushan Kumar & Hemanta Kumar Kar^{2nd} edition, 2016)

1. History of Leprosy in India: A Historical overview from Antiquity to the introduction of MDT
2. Epidemiology of Leprosy
3. Global Leprosy situation: Historical perspective, Achievements, Challenges and future steps
4. Changing National Scenario, National Leprosy Control programmes, National Leprosy Eradication Programme, and New Paradigms of Leprosy Control
5. Immunogenetics of Leprosy
6. Bacteriology of Leprosy
7. Immunological Aspects
8. Biochemical Aspects of Leprosy
9. Pathological Aspects of Leprosy
10. Structure Electrophysiological and Ultrasonographics studies of Peripheral Nerve
11. Pathomechanisms of Nerve Damage
12. Naturally occurring Leprosy: Mycobacterium leprae and other environmental mycobacteria in Nature
13. Experimental Leprosy: Contributions of Animal Models to Leprosy Research
14. History taking and clinical examination
15. Case definition and clinical types of Leprosy
16. Classification
17. Methods of Nerve examination
18. Histoid Leprosy
19. Laboratory diagnosis

20. Serological and molecular diagnosis of leprosy
21. Differential diagnosis of Dermatological Disorders in relation to Leprosy
22. Differential diagnosis of Neurological disorders in relation to Leprosy
23. Systemic involvement in Leprosy
24. Leprosy and Human immunodeficiency virus coinfection
25. Leprosy and pregnancy
26. Childhood Leprosy
27. Ocular Leprosy
28. Neuritis: Definition, Clinicopathological manifestations and Proforma to record nerve impairment in Leprosy
29. Leprosy Reactions: Pathogenesis and clinical features
30. Chemotherapy of Leprosy
31. Chemotherapy: Development and evolution of WHO-MDT and Newer treatment regimens
32. Management of Leprosy reactions
33. Management of neuritis and neuropathic pain
34. Chemoprophylaxis in Leprosy
35. Leprosy vaccine: Immunoprophylaxis and Immunotherapy
36. Nursing care in Leprosy patients
37. Deformities of Face, Hands, Feet and Ulcers and their management
38. Deformity and Disability prevention
39. Relapse in Leprosy
40. Drug resistance in Leprosy
41. Morbidity and Mortality in Leprosy
42. Rehabilitation
43. Community-based initiatives in Comprehensive Leprosy Work
44. Psychosocial Aspects in Leprosy
45. Human Rights and Stigma in Leprosy
46. Health Promotion, Education and Counseling
47. Role of NGOs in National Leprosy Eradication Programme

5. **Teaching and Learning Methods**

The emphasis should be on patient oriented learning

1. Acquire skills in clerking patients and communication through structured bedside clinics.
2. "On the job teaching" by faculty in the OPD and during ward rounds.
3. "One-One" or small group teaching of dermatosurgery and other procedures
4. Grand rounds
5. Structured "class-room" based clinics to prepare the candidate for the final summative exam (University)
6. Monthly Seminars
7. Monthly Symposia
8. Weekly Journal clubs
9. Group discussions
10. Multidisciplinary team meetings- Skin malignancies, Leprosy, Tuberculosis, HIV, Genodermatoses, and for management of leprosy reactions.
11. Tutorials- dermatopathology, clinical microbiology and virology, instruments
12. Didactic lectures (optional)
13. Students should attend the following training modules to attain basic competence in: Biostatistics, Research Methodology, Medical Ethics, Good medical practice, Communication skills, Medical education
14. Students should update their knowledge through attendance of subject related CMEs, workshops and conferences.

6. **STRUCTURED TRAINING PROGRAM FOR DEGREE COURSE-DVL(3 years)**

S. No.	First Year	Second Year	Final Year
1	Knowledge : General Dermatology, Leprosy and Venereology including basic sciences, pathology, clinical microbiology and virology	General Dermatology, Leprosy and Venereology including basic sciences therapeutics, pathology, clinical microbiology and virology	General Dermatology, Leprosy and Venereology including basic sciences, therapeutics, pathology, clinical microbiology, virology and recent advances
2	General DVL OPD clinics (minimum of 3/week) and ward postings-minimum of 6 months/year Special clinics: Vitiligo, Pigmentary, immunobullous, contact dermatitis, connective tissue diseases, psoriasis, Pediatric Dermatology, Leprosy, STI	General DVL OPD clinics (minimum of 3/week) and ward postings-minimum of 6 months/year Special clinics: Vitiligo, Pigmentary, immunobullous, contact dermatitis, connective tissue diseases, psoriasis, Pediatric Dermatology, Leprosy, STI	General DVL OPD clinics (minimum of 3/week) and ward postings -minimum of 6 months/year Special clinics: Vitiligo, Pigmentary, immunobullous, contact dermatitis, connective tissue diseases, psoriasis, Pediatric Dermatology, Leprosy, STI

3	1.Elicit history and perform a clinical examination, arrive at a diagnosis, list differential diagnosis, select appropriate investigations and device a treatment plan.	1.Elicit history and perform a clinical examination, arrive at a diagnosis, list differential diagnosis, select appropriate investigations and device a treatment plan. Provide information about the disease in terms of prognosis, complications and treatment outcome. Counselling and follow up of patients should be advocated	1..Elicit history and perform a clinical examination, arrive at a diagnosis, list differential diagnosis, select appropriate investigations and device a treatment plan. Provide information about the disease in terms of prognosis, complications and treatment outcome. Counselling and follow up of patients should be advocated.
4	<p>Procedural skills for trainees:</p> <ol style="list-style-type: none"> 1. Hand washing and sterile technique for procedures. 2.Take an informed consent for procedures 3. Methods of administration of local anesthesia for biopsies and other procedures 4. Biopsies: Skin (punch, shave, elliptical, wedge) biopsies under sterile conditions, under supervision 5. Describe histological features of common diseases including leprosy 6.Intralesional injections 7.Cryotherapy 	<p>Procedural skills for trainees:(in addition procedural skills attained in year 1)</p> <ol style="list-style-type: none"> 1.Biopsies: nail, oral, nerve biopsies (under supervision) 2.Phototherapy- Administer Narrow UVB, PUVA, targeted phototherapy, hand and foot phototherapy, bath PUVA, soak PUVA 3.Perform Patch tests-standard and photopatch, interpret results and counsel 4. Perform Contact immunotherapy for alopecia areata 5.Perform a drug challenge (under supervision) 6. Administer all Dermatology, Leprosy and Venereology related drugs and biologics in appropriate doses under supervision, after counseling patients on the side effects, expected benefits, interactions and teratogenic potential 	<p>Procedural skills for trainees:</p> <p>The postgraduate trainee should be able to perform the procedures learnt in year 1 and 2 safely and effectively, under supervision when required.</p>

<p>8.Paring</p> <p>9.Nail Avulsion</p> <p>10.Electrosurgery</p> <p>11. Radiofrequency surgery</p> <p>12.Molluscum needling</p> <p>13. Chemical cautery</p> <p>14.Auto Inoculation of Wart</p> <p>15. Vitiligo grafting</p> <p>16.Acne Scar Surgeries</p> <p>17.Dermaroller</p> <p>18.PRP</p> <p>19.Aesthetic Procedures(Botox / Fillers- Demo)</p> <p>20. Lasers (demo)</p> <p>21. Wood's lamp- indications and interpretation of results</p> <p>22. Students must be familiar in administering</p> <p>i)Saline soak compresses, bleach baths, medicated tub bath, wet wraps</p> <p>ii) Fluid and temperature management in patients with skin failure</p> <p>23.Aware of principles of barrier nursing in patients</p>	<p>7 .Describe histologic features of common benign and malignant lesions and leprosy, interpret special stains and immunohistochemistry</p> <p>8. Observe preparation (grossing, staining) of dermatopathology specimens.</p> <p>9. Observe direct and indirect immunofluorescence procedures of immunobullous and connective tissue diseases(Optional)</p> <p>10. Microbiology and Virology: i)Learn techniques of plating and culture of bacteria associated with skin and soft tissue infections, fungus, M.Tb and atypical mycobacteria and STIs</p> <p>ii) Observe and learn methods of performing and interpretation of serological tests relevant to STIs iii)Observe lab techniques in diagnosis HIV</p> <p>11. Dermatoscope- Learn the features of dermascopic images of relevant common skin conditions and help to arrive at a diagnosis and differentiate benign and malignant pigmented lesions.</p> <p>12. Trichoscopy- should be able to recognize common hair shaft abnormalities</p> <p>13.Radiodermatology – Describe and interpret the features of relevant CXR, CT, MRI and fluoroscopic images</p>	
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	with skin failure	<p>eg. Esophagus in scleroderma</p> <p>14 .Peripheral Nerve High Resonance USG in Leprosy</p> <p>15. Teledermatology: Students should be introduced to teledermatology</p> <p>16.Trainees can observe and learn basics of compounding of common topical preparations used in Dermatology (optional)</p>	
5	<p>Safety and Quality– Trainees should:</p> <p>1.Report adverse events during procedures to the supervisor</p> <p>2. Report needle stick injuries</p> <p>3. Be able to dispose medical waste correctly</p>	<p>Safety and Quality</p> <p>1.Report adverse drug reactions</p> <p>In addition to those already mentioned (1st year)</p>	<p>Safety and Quality</p> <p>1.Trainees should perform a clinical audit</p>
6	<p>Dermatology Laboratory:</p> <p>1.Learn methods for appropriate specimen collection- pus culture, throat culture, nasal swab,Tzanck smear, herpes culture, fungal culture, Mycobacterium Tb and atypical Mycobacteria, Leishmaniasis, and STIs</p> <p>2.Trainees should be trained to perform KOH, Gram stain, Leishman's stain/ Giemsa stain, Tzanck, , ZN stain, demonstrate sclerotic bodies</p> <p>Leprosy- Perform slit skin smears, stain and interpret slides</p> <p>STI-Students should be able to identify STI pathogens- trichomonas,</p>	<p>Dermatology Laboratory: Trainees should be able to perform KOH, Gram stain, Leishman's stain/ Giemsa stain, Tzanck smear , ZN stain, demonstrate sclerotic bodies</p> <p>Leprosy- Perform slit skin smears, stain and interpret slides</p> <p>Calculate BI and MI</p> <p>STI-Students should be able to identify STI pathogens- trichomonas, gonococci, H.ducreyi, clue cells and Donovan bodies</p> <p>Perform Dark field examination for treponema pallidum</p>	<p>Dermatology Laboratory: Trainees should be able to perform and interpret independently the following: KOH, Gram stain, Leishman's stain/ Giemsa stain, Tzanck, ZN stain, demonstrate sclerotic bodies</p> <p>Leprosy- Perform slit skin smears, stain and interpret slides</p> <p>Calculate BI and MI</p> <p>STI-Students should be able to identify STI pathogens- trichomonas, gonococci, H.ducreyi, clue cells, and Donovan bodies. Identify MNGs.</p> <p>Perform Dark field examination for treponema pallidum</p>

	<p>gonococci, H.ducreyi, clue cells and Donovan bodies. Should be able to identify MNGs in herpetic infections Dark field examination for treponema pallidum</p>		
7	<p>Dermatology emergencies- Trainees should attend to dermatology emergencies during their 24 hour “on call” duties under supervision</p>	<p>Dermatology emergencies- Trainees should attend to dermatology emergencies during their 24 hour “on call” duties under supervision</p>	<p>Dermatology emergencies- Trainees should be able to independently diagnose and treat common emergencies and seek help from the attending consultant when required</p>
8	<p>Internal rotation: Venereology posting – 70 days / year – This is for Institutions where Venereology is present as a separate department.</p> <p>External rotation (MD trainees) Microbiology Department - 3 weeks Pathology (Dermatopathology)- 3 weeks Infectious Disease Unit/ Internal Medicine - 4 weeks</p>	<p>External rotation(MD trainees)-optional Community Dermatology - should participate in school surveys,/camps or work in a secondary care dermatology departments in rural areas (2 weeks)</p> <p>-</p>	
9	<p>Academic Activities Attend CME-1 (optional)</p>	<p>Academic activities 1. Attend State level conference,CME 2. Participate in Undergraduate teaching</p>	<p>Academic activities 1. Attend National conference,CME 2. Participate in Undergraduate teaching</p>

Leprosy

	First Year	Second Year	Final year
	<p>1. Trainees should be able to take a history, examine skin lesions, peripheral nerves, perform a sensory-motor examination and record findings, list deformities and signs of reaction and classify the disease</p> <p>2. Trainees should learn to counsel patients and attenders about early signs and symptoms of leprosy, ameliorating the taboo against leprosy .</p> <p>3. Trainees should develop skills in interacting with the patients, persuading them to bring the family members for examination</p> <p>4. Stress should be given to acquire knowledge on medical ,occupational and social rehabilitation of patients</p>	<p>1. Trainees should be encouraged to attend various camps organized at periphery level by district authorities.</p> <p>2. Trainees should take part in health education regarding prevention of damage to eyes, deformities of limbs.</p> <p>3. Trainees should be posted to leprosy homes rehabilitation centres, district leprosy hospitals for Institutions where leprosy patient load is inadequate for satisfactory training of postgraduates</p>	<p>1. Trainees should be able to take a focused history, perform a relevant clinical examination, do slit skin smears for AFB, interpret results, treat and counsel patients with leprosy.</p> <p>2. Trainees should attain a sound knowledge of the principles of rehabilitative surgery, use of prostheses and disability prevention.</p>

Venereology

Knowledge Skills	Attitude Skills	Psychomotor Skills
First Year		
Classification of STDS	Communication skills and Case holding	Blood sample collection, labeling
Impact of STDs on the World – past, present and future	Non Judgmental and Non Moralistic history taking	Smear preparation, Staining and microscopy
Incubation period and Window period and their importance in	Psychological impact of STDS	Examination of a patient and describing the findings.

STDS		
Difference between STDs and STIs		Disposal of Waste
Hospital Waste Management		
SECOND & THIRD YEAR		
Syndromic Management and other Managements of STDS	Attitude towards HRB persons like FSW, MSM, TGs etc	RPR Test, HIV Test, Smear preparation from lesions
PEP for HIV	Pre test and Post test Counseling for HIV	Vaginal Speculum examination
Complications of STDs	Sexual Orientation	ViAViLi Testing
Gender Identity, Gender Role	Initiation of HAART	Colposcopy (Optional)
Human Sexual Behavior and Sexual Response cycle, Sex problems	Premarital and Pre employment testing	Podophylline application
ART drugs	Partner revelations, Partner Participation,	Prostatic massage
Govt. Program(NACP)	Follow Up Skills	Paraphimosis reduction (Optional)
Legal aspects of STDs, Sex and Sexuality	Case reporting	Semen analysis, and Circumcision(Optional)
Use of newer investigations tools in the management of STDs	Partner notification	Lumbar Puncture (Optional)
Vaccines in STDS		Proctoscopy
Sex Reconstruction Surgery		
Pre marital and Pre employment tests		
Interpretation of tests		

Marriage and STDs, Infertility		
ART Failure and 2 nd line ART, Resistance and Reinfection, Partner treatment		
Emergency contraception		

STDs- Sexually Transmitted Diseases, STIs - Sexually Transmitted Infections, PEP- Post Exposure Prophylaxis, HIV- Human Immunodeficiency Virus, ART – Anti Retrovirus Therapy, NACP – National AIDS Control Program, FSW – Female Sex Worker, MSM – Men having Sex with Men, TG – Transgender, HAART – Highly Active Anti Retroviral Therapy, RPR – rapid Plasma Reagin Test, ViAViLi Test – Visual Inspection of Cervix with Acetic Acid and Lugols Iodine.

During IInd year, the Students are encouraged to undergo special postings for learning new advanced techniques / procedure / skills in institutions of higher repute where the requisite facilities are available without affecting the duties of the parent department.

7. Evaluation of the candidates in both theory and practical aspects will help the candidate in improvement of his/her knowledge, skills and attitude.

8. COMPETENCY ASSESSMENT :

OVERALL:

- | | | |
|--|------------|-----------|
| a) Communication / commitment / Contribution /
Compassion towards patients and Innovation | ()
() | - 5 Marks |
| b) Implementation of newly learnt techniques/skills | () | |

Number of cases presented in Clinical Meetings/ Journal clubs/seminars	- 5 marks
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Number of Posters/Papers presented in Conferences/ Publications and Research Projects	- 5 marks
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No. of Medals / Certificates won in the conference / Quiz competitions and other academic meetings with details.	- 5 marks
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Total	----- 20 Marks -----
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- Journal based / recent advances learning
- Patient based /Laboratory or Skill based learning
- Self directed learning and teaching
- Departmental and interdepartmental learning activity
- External and Outreach Activities / CMEs

PG CLINICAL COURSES

VIVA including Competency Assessment - 80 Marks (60 + 20)

Log Book - 20 marks

ASSESSMENT SCHEDULE IS AS FOLLOWS

Year of study	Period				Total Max.20 marks
I year	Upto Dec	10 marks	Upto June	10 marks	20 Marks
II year	Upto Dec	10 marks	Upto June	10 marks	20 Marks
III year	Upto Oct	10 marks	Upto Feb.	10 marks	20 Marks
	AVERAGE				20 marks

9. Dissertation and University Journal of Medical Sciences:

As per the 49th SAB Resolution under Point No. 2 and in the 52nd SAB it was reiterated regarding the topic for dissertation

The topic for the dissertation should be registered and sent to the University after Ethics Committee approval before 31st of December of the first Post Graduate Year. Only one change of topic with proper justification from the Head of the Department is permitted before 31st March of the first Post Graduate Year. The change of dissertation title will not be permitted after 31st March of the First Post Graduate Year. This modification in regulation will be scrupulously followed from the academic year 2015-16 admission onwards.

As per Medical Council of India Post Graduate Medical Education Regulations 2000 (amended upto 10th August 2016) clause 13.9 A Postgraduate student of a Postgraduate degree Course in broad specialties/Super Specialties would be required to present one poster presentation to read one paper at a National/State conference and to present one Research paper which should be published/accepted for publication/sent for publication during the period of his Postgraduate studies so as to make him eligible to appear at the Postgraduate Degree Examination.

As per MCI Clause 14 (4)(a), thesis shall be submitted atleast 6 Months before the Theory and Clinical/Practical Examination.

A candidate shall be allowed to appear for the Theory and Practical/Clinical Examination only after the acceptance of the Thesis by the Examiners.

The periodical evaluation of dissertation/log book should be done by the guide / HOD once in every six months. The HOD should ensure about the submission of dissertation within the stipulated time.

Regarding submission of articles to the University Journal of Medical Sciences for all the PG Degree/Diploma courses, it is mandatory that the students have to submit at-least one research paper. Case Reports are not considered as Research Paper

10. THEORY EXAMINATION:

Paper – I Basic Science as applied to Dermatology, STDs and Leprosy

Paper – II Dermatology

Paper – III STD & Leprosy

Paper – IV Recent advances in field of Dermatology, Applied Sciences pertaining to skin /VD & internal medicine and skin

Question paper Pattern

Paper I

SECTION – A DERMATOLOGY AND LEPROSY

Write notes on: I. ANATOMY:	2 x 5	= 10
II. PHYSIOLOGY:	2 x 5	= 10
III. BIO-CHEMISTRY:	2 x 5	= 10
IV. PHARMACOLOGY:	2 x 5	= 10
V. MICROBIOLOGY:	2 x 5	= 10
VI. PATHOLOGY:	2 x 5	= 10

SECTION B – STDs

I.	ANATOMY:	2 x 5	= 10
II.	PHYSIOLOGY:	2 x 5	= 10
III.	BIO-CHEMISTRY:	1 x 5	= 5
IV.	PHARMACOLOGY:	1 x 5	= 5
V.	MICROBIOLOGY:	1 x 5	= 5
VI.	PATHOLOGY:	1 x 5	= 5
	Total	:	100 marks

Paper II

I. Elaborate on:	2 x 15	= 30
II. Write notes on:	10 x 7	= 70
	Total	100 marks

Paper III

SECTION – A (STD)

- I. Elaborate on: 1 x 15 = 15
- II. Write notes on: 5 x 7 = 35

SECTION – B (LEPROSY)

- I. Elaborate on: 1 x 15 = 15
 - II. Write notes on: 5 x 7 = 35
- Total 100 marks

Paper IV

SECTION – A (DERMATOLOGY & LEPROSY)

- III. Elaborate on: 1 x 15 = 15
- IV. Write notes on: 7 x 7 = 49

SECTION – B (VENERELOGY)

- III. Elaborate on: 1 x 15 = 15
 - IV. . Write notes on: 3 x 7 = 21
- Total 100 marks

11. PRACTICAL EXAMINATION:

2 LONG CASE X 40 MARKS	80 MARKS
2 SHORT CASES X 25 MARKS (LEPROSY 1, STD 1)	50 MARKS
CASE DISCUSSION	50 MARKS
Spotters - 10 x 5 = 50	
OSCE 5 stations x 4 marks	20 MARKS
CLINICAL TOTAL	200 MARKS (A)

		VIVA	
VIVA	DERMATOLOGY	DISCUSSION INSTRUMENTS DRUGS SLIDES	80 MARKS
	STD	DISCUSSION INSTRUMENTS CHARTS KIT & CONDOM	
LOG BOOK			20 MARKS
VIVA TOTAL			100 MARKS (B)
AGGREGATE (CLINICAL + VIVA)			300 MARKS (A+B)
MINIMUM REQUIRED FOR PASS (50%)			150 MARKS
DISSERTATION			APPROVED / NOT APPROVED

MD DVL

CLINICALS		
Two Long case x 40 marks		80 Marks
Two short cases x 25 Marks (Leprosy 1 + STD 1)		50 Marks
Spotters		50 Marks
OSCE		20 Marks
Clinical Total		200Marks(A)
VIVA (including Competency Assessment - (CA)) 60 + 20 marks		
Dermatology (Including Leprosy) 40 + 10 marks	Discussion Instruments Drugs	80 Marks
STD (10 marks)	Discussion Instruments	

	Charts Kits & Condom	
LOG BOOK		20 Marks
Viva Total (Viva+CA+Log Book		100 Marks (B)
Aggregate (Clinical + Viva Total)		300 Marks (A+B)
Minimum required Pass Marks		150 Marks
Dissertation		Approved / Not Approved

Clinical Examination in MD DVL -Detailed

CLINICALS		
1.	Long Case – 2 X 40 = 80	80 marks
2.	Short Case – 2 X 25 = 50 (Leprosy -1 , STD – 1)	50 marks
3.	Spotters – 10 X 5 =50	50 Marks
4.	OSCE / OSPE -5X4=20	20 marks
Total		200 Marks (A)

MD DVL

Clinical Exams

I. LONG CASE		
Duration : 40 mins for Examination; 15 mins for Assessment Total – 55 mins	A)History	10 marks
	B) Physical findings & Clinical Bedside tests	15 marks
	C) Diagnosis and differential Diagnoses	5 marks
	D) Management (5+5+5)	15marks
	1. Investigation	5 marks
	2. General Measures	5 marks
	3. Specific Treatment (Topical &Systemic	5 marks
	E)Communication & Counseling	5 marks
Total		50 marks
II. SHORT CASE		
STD CASE Examination 15 mins	Focused History	5 marks
	Physical Findings	5 marks
	Investigations	3 marks

Assessment 10 mins	Diagnosis and differential Diagnoses		3 marks
	Treatment		3 marks
Total – 25 mins	Counseling		3 marks
	Follow up / Partner Management		3 marks
Leprosy Examination 15 mins	Focused History		5 marks
	Physical Findings		10 marks
Assessment 10 mins	Diagnosis		3 marks
Total – 25 mins	Management		7 marks
	Investigation	Treatment Medical Surgical, Counseling & Education	
Total (STD Case + Leprosy)			50 marks

Spotters:

10 Spotters including at least 1 case/ case scenario of STD and 1 case/ case scenario of Leprosy

Total – 30 marks

Time – 30 mins

Each spotter- 3 mins

1 min for Examination

2 mins – Assessment

12.LOG BOOK:

The post graduate students shall maintain a record(log)book of the work carried out by them and the training program undergone during the period of training.

The record or log book shall be checked and assessed periodically by the faculty members imparting the training

Periodic review of Log book and Dissertation have to be done in the Department by guide/HOD once in every 6 months

13.VIVA

DERMATOLOGY LEPROSY 8 – mins 50 marks	and	General dermatology & Leprosy	10 marks
		Instruments	10 marks
		Drugs	10 marks
		Recent Advances	10 marks
		Aesthetic / Dermato-surgery	10 marks
STD 2-mins 10 marks		Applied Basics	10 Marks
		Instruments	
		Charts	
		Kit & Condom	
Total			60 marks
Log book		20 marks	
Viva total including CA		80 marks	
Log Book (20 Marks)+ Viva Total (80 Marks		100 marks (B)	
Aggregate (Clinical + Viva + Log book)		300 marks (A + B)	
Minimum required for Pass (50%)		150 marks	
Dissertation		Approved / Not Approved	

14. OSCE /OSPE

10 Stations, Each -2 mins

Marks: 5 X 10 = 50 marks

1. Histopathology – Tumors -Benign/malignancy
2. Histopathology – Non - Tumors
3. Wet Mount / KOH / Tzanck / SSS / Grams Stain / Any culture
4. STD Station I
5. STD Station II
6. Leprosy – Splint / Prosthesis
7. Occupational Dermatology
8. Dermato-surgery
9. Aesthetic Dermatology
10. X-rays / CT scans / MRI/Any image

15. Recommended books (The latest Edition of the text books listed is recommended)

1. Rook's Text book of Dermatology. Edited by Christopher Griffiths, Jonathan Barker, Tanya Bleiker, Robert Chalmers & Daniel Creamer. 9th edition.
2. Fitzpatrick's Dermatology in General Medicine. Lowell A. Goldsmith, Stephen I. Katz, Barbara A. Gilchrest, Amy S. Paller, David J. Leffell, Klaus Wolff. 8th Edition
3. Dermatology (Bologna, Dermatology). Jean L. Bologna MD, Joseph L. Jorizzo MD, Julie V. Schaffer MD, Jean L. Bologna, Joseph L. Jorizzo, Julie V. 3rd Edition
4. IADVL Text Book of Dermatology. Editor S. Sacchidanand, Co-editors Chetan Oberai, Arun C. Inamadar. 4th edition
5. Andrew's Diseases of the Skin – Clinical Dermatology. James DJ, Berger TG, Elston DM, Neuhaus 12th edition
6. Sexually Transmitted Diseases. King K. Holmes, P. Frederick Sparling, Walter E. Stamm, Peter Piot, Judith N. Wasserheit, Lawrence Corey, Myron S. Cohen and D. Heather Watts. 4th edition.
7. Sexually Transmitted Infections, Bhushan Kumar, Somesh Gupta. 2nd Edition.
8. Sexually Transmitted Diseases and HIV/AIDS. Vinod K. Sharma. Second edition
9. Oxford Handbook of Genito Urinary Medicine, HIV and Sexual Health Edited by Richard Pattman and K Nathan Sankar
10. Sexually Transmitted Infections The Facts – David Barlow
11. Sexually Transmitted Infections and Sexually Transmitted Diseases Edited by Gerd Gross and Stephen K Tying
12. ABC of Sexually Transmitted Infections, Sixth Edition by Karen E Rogstad
13. Color atlas and synopsis of Sexually Transmitted Diseases, Third Edition by Hunter Handsfield
14. Sexually Transmitted Infections and HIV- An illustrated guide to management by Veerakathy Harindra, Verapol Chandeying, and N. Usman
15. Websites of WHO, CDC and NACO for current updates
16. Hand book of Sexual dysfunction Edited by Richard Balon and R. Taylor Segraves
17. Textbook of Clinical Sexual Medicine by IsHak and Waguhi
18. Leprosy, 2nd edition. Robert C. Hastings. Churchill. Livingstone: 1994
19. IAL text book of Leprosy. Editors Bhushan Kumar, Hemanta Kumar Kar. 2nd edition

20. Handbook of Leprosy. by W.H. Jopling
21. Dharmendra, Leprosy 2 Volumes – 1st Edition 1985, Samant and Company.
22. Histopathology of the Skin. Walter – F. Lever Gundula Schaumburg Lever, 11th edition.
23. Weedon's Skin Pathology. 4th edition
24. Comprehensive dermatologic drug therapy. Stephen E. Wolverton. 3rd edition.
25. Fisher's Contact Dermatitis. Robert L. Rietschel, Joseph F. Fowler, Alexander A. Fisher. 6th edition
26. Diseases of the nails and their management. Baran R, Dawber RPR, De Berker. 4th edition
27. A Textbook of Skin Disorders of Childhood and Adolescence. Hurwitz Clinical Pediatric Dermatology. Amy S Paller, Anthony J. Mancini MD. 5th Edition.
28. Dermatological Signs of Systemic Disease. Jeffrey Callen Joseph Jorizzo John Zone Warren Piette Misha Rosenbach Ruth Ann Vleugel. 5th Edition.
29. Surgical Management of Vitiligo. Somesh Gupta, Mats J. Olsson, Amrinder J. Kanwar, Jean-Paul Ortonne
30. ACS(I) Textbook on Cutaneous and Aesthetic Surgery Hardcover – 2012 by Venkataram .
31. Text Book & Atlas of Dermato Surgery & Cosmetology. Satish S. Savant, Radha Atalshah, Deepak Gore

** Note : The editions are as applicable and the latest editions shall be the part of the syllabi.

16. RECOMMENDED JOURNALS

1. Archives of Dermatology
2. British Journal of Dermatology
3. Indian Journal of Dermatology
4. Indian Journal of Dermatology, Venereology & Leprosy
5. Journal of American Academy of Dermatology
6. Journal of European Academy of Dermatology & Venereology
7. International Journal of Dermatology
8. Seminars in Cutaneous Medicine & Surgery

9. Clinical and Experimental Dermatology
10. Journal of Investigative Dermatology
11. Dermatology online
12. Indian dermatology online journal
13. Indian Journal of Leprosy
14. Leprosy Review
15. International Journal of STD & AIDS
16. Indian journal of Sexually transmitted diseases
17. Genitourinary Medicine
18. Pediatric Dermatology
