

Curriculum for PhD in Agadtantra

1) Etymology of Agadtantra:

a) Introduction of Agadtantra:

- Agada Tantra, its sequential development during Veda kala, Samhitha kala, Samgraha kala and Adhunika kala.
- Definition of Visha, properties of visha and its comparison with madya and oja, visha samprapti, visha prabhava, visha-vega, vegantara and visha karmukata (toxicodynamic and toxicokinetic study).
- Examination of poisons as per Ayurvedic Methods.
- Study of the traditional and folklore vishachikista sampradaya.

b) Jangam Visha:

- Study of Jangama visha and their sources (Animal poisoning and Zoonotic Diseases). Descriptive study of snakes according to ancient and contemporary knowledge. Causes of snake bite and its types. Composition of snake venom and its pharmacological actions. Signs and symptoms of envenomation and its prognostic signs. Clinical features of Vrischika (scorpion), Luta (spider), Grihagadhika (Lizard), Mushaka (rats), Alarka (dogs), Makshika and Mashaka (mosquitoes) and their pathologic manifestations including their role in the manifestation of communicable diseases. Shanka visha and its management. Visha sankat and Visha Kanya.

c) Dushi visha, Gara visha & Ahar visha:

- Garavisha and Dushi visha, their varieties, signs, symptoms and management with contemporary relevance. Detailed study of Allergies including allergic manifestations in the eyes, nose, lungs and skin.
- Chaturvimsati upakrama (24 management procedures).
- Management of Garavisha and Dushivisha. Treatment of Allergies including allergic manifestations in the eyes, nose, lungs and skin.
- Detailed study of Madya visha and substances acting on the nervous system; substance abuse. (Diagnosis, Management and De-addiction)
- Detailed study of the contemporary knowledge about vishajanya Janpadodhvansaniya roga (community health problems due to poisons - Environmental pollution, water pollution, soil pollution, air pollution, Industrial pollutions etc. their features and management according to ancient and recent concepts.

- Concept of Virudha aahara, Aahara visha and Satmyasatmyata in contemporary and Ayurvedic views.
- Management of the toxic manifestations caused by the contact poisons (paduka, vasthra, abharana, mukhalepa- vishabadha etc).

2) Contemporary Toxicology:

a) General principles of treatment of Poisoning.

- Examination of poisons as per Contemporary Methods.
- Fundamental Principles for treatment of poisoning
- Extra -corporeal techniques (dialysis etc) for removal of poisons.
- General and specific treatment of different types of Sthavara visha.
- General and specific treatment of different types of Jangama visha (animal poisons, insect poisons, snake bites and other zoonotic diseases).
- Emergency medical management of poisoning including preparation, administration and complications of antivenoms/antisera.
- Management of food poisoning.
- Death due to poisoning,
- Duty of physician in poisoning, in cases of suspected poisoning.
- Post mortem findings in poisoning.

b) Sthavar visha (Vegetative and metal poison):

Descriptive and comparative study of Upavisha in unison with Contemporary Toxicology.

Descriptive study of sthavara visha, definition, classifications, classical signs and symptoms of poisoning including vanaspatic (phyto poison), khanija (mineral) and compound sthavara visha.

c) Krutrim Visha:

- Descriptive study of kritrim visha, definition, classifications, classical signs and symptoms of poisoning, PM appearance, medicolegal importance and treatment
- Conceptual study:-Drug interactions and incompatibility,
- Diagnosis and Management of Drug Induced Toxicity
- Pharmacovigilance

3) Vyavahar Ayurved:

a) Medicolegal aspect of Identification:

- Definition of Vyavahara Ayurveda, its evolution in ancient and contemporary periods.
- Personal identity and its medico-legal aspects.

b) Medicolegal aspect of death:

- Death and its medico-legal aspects (Medical Thanatology)
- Asphyxial deaths and its medico-legal importance.
- Death due to starvation, heat and cold, lightening and electricity. Suspended Animation.
- Medico-legal autopsy.

c) Medicolegal aspect of Injury:

- Injuries due to explosions, chemical and nuclear warfare.
- Medico-legal aspects of injuries and wounds.

d) Medicolegal aspect of Pregnancy, Delivery, Abortion & Infanticide:

- Impotence and sterility-Its medico-legal aspects.
- Regulations of Artificial Insemination.
- Medico –legal aspects of surrogate motherhood.
- Sexual offences and perversions.
- Medico-legal aspects of virginity, pregnancy, delivery, abortion, infanticide and legitimacy with related acts.

e) Medicolegal aspect of Forensic Psychiatry.

4) Vidhivaidyaka:

- Indian Penal Code,
- Criminal procedure code and study of related acts like Indian Evidence Act, Pre Natal Diagnostic Test Act, Nursing Home Act, Human Organ Transplantation Act, Drugs and Cosmetic Act 1940, Narcotic drugs and Psychotropic substances Act 1985, Pharmacy Act 1948, Drugs and Magical Remedies (Objectionable Advertisements) Act 1954, Medicinal and Toilet Preparations Act 1955 and Anatomy Act etc. Any related act enacted by the government from time to time.
- Courts and Legal procedures.
- Forensic Science Laboratory
- Medico legal aspects of mental illness
- Duties and privileges of physician.
- Structure of Central Council of Indian Medicine, its jurisdiction and functions. Code and Conducts as per the CCIM, Rules and Regulations there under.
- Respective State Council of Indian Medicine, its structure, power, voluntary duties.
- Doctor –patient relationship.

- Rights and privileges of patients; Euthanasia.
- Professional secrecy and privileged communication.
- Professional negligence and malpractice
- Indemnity Insurance scheme.
- Consumer Protection Act related to medical practice.
- Ethics as in classics.
- Types of physicians and methods of identification, Pranabhisara and Rogabhisara Physicians, qualities of physician, responsibilities of Physicians, Chaturvidha vaidya vriti, duties of physicians towards patients, Vaidya sadvritam, Apujya Vaidya who is accepting fees, relationship with females.

5) Aushadhi Yoga Vigyana:

a) Shodhan and Maran of poisonous drugs:

- Study of process for sodhana, marana and samskarana of poisonous drugs. Pharmacodynamics of different formulations used in Agadatantra
- Study of pharmacology and usage of antidotes as per the Ayurvedic and contemporary science.
- Fundamentals of pharmaceuticals according to Ayurvedic and contemporary point of view.
- Chemical, analytical, laboratory examination of poisons and suspicious substance.
- Introduction of different instruments /equipments used in the examination of poisons.

b) Clinical, Analytical & Experimental Toxicology:

- c) Introduction to Clinical toxicology
- d) Introduction to Experimental toxicology
- e) Introduction to Toxicology – genomics
- f) Pharmacodynamics of different formulations