

## (ARS)

### المعايير الأكاديمية المرجعية لبرنامج الماجستير في أمراض التخاطب

#### أ - المعرفة والفهم:

- . Enlarge the basic medical knowledge and made more thorough primarily by the study in detail of the anatomy, physiology and pathological physiology of the functions of voice, speech, language, hearing, and swallowing.
- . Comprehend the neurophysiological principles of the central encoding, decoding, memory and integration processes in speech, hearing, and swallowing.
- . Know the genetic principles and the influence of the environment in the development of language, speech, hearing, and swallowing abilities.
- . Identify the developmental and aging processes as to voice, language, speech, hearing, and swallowing.
- . Understand the psychological and behavioral aspects of verbal communication.
- . Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the voice disorders that include:
- . Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the speech disorders that include:
- . Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the language disorders that include:
- . Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the swallowing disorders (Dysphagias) due to problems in the oral, and/or pharyngeal stages of swallowing (structural lesions, neurological disorders).
- . Acquire selected knowledge from other disciplines required for phoniaticians (acoustics, electronics, phonetics, linguistics, pedagogics, psychology and behavior sciences) through attending of relevant basic science courses. This will form the starting point for the formation of a Phoniatician and also the basis for interdisciplinary cooperation and to carryout research work.
- . Acquire the basic knowledge for common ENT problems in the domain of phoniatics and for basic general surgical skills.
- . Acquire the basic knowledge for evaluating of children with outpatient health problems, disabilities and milestones delay.
- . Acquire the basic knowledge in evaluation and management of psychiatric patients in the domain of phoniatics.
- . Acquire the basic knowledge for interpreting a basic and computerized audiological report.
- . Acquire teaching abilities relevant to disorders of voice, speech, language and swallowing in order to participate in planning and implantation of that field.
- . Know the Legal and medicolegal aspects in practise of phoniatic disorders as well as medical ethics.

- . Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, and line of treatments of endocrine disorders related to patients with communication and swallowing disorders.
- . Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics of mental retardation and brain damaged motor handicapped child (cerebral palsy).
- . Acquire specific knowledge in different types of grafts.
- . Acquire specific knowledge in different types of flaps.
- . Acquire advanced knowledge in surgical management of the cleft palate (primary and secondary repair).
- . Identifies the type of teeth malocclusion and its effect on the speech.
- . Identifies lines of management of teeth malocclusion in order to correct the underling speech disorder.
- . Identifies the types of obturators used in management of different speech and swallowing disorders.
- . Recognize how to design and select a psychometric test for specific patient group. Identify the methods of application of a psychometric test. Comprehend the validity and reliability of a psychometric test.
- . Identify the principles of data collection, presentation and analysis of data. Identify the research methodologies related to communication and swallowing disorders.
- . Identify the causes, diagnosis and lines of management of vocal fold immobility.
- . Identify the diagnosis, differential diagnosis, classification and lines of management of cancer larynx.
- . Identify the causes, diagnosis and lines of management of open and closed nasality.
- . Identify the causes, diagnosis and lines of management of conductive and sensori-neural hearing impairment.

#### **ب - القدرات الذهنية:**

- . Outlines the therapeutic measures in the field of diseases of voice, speech, language and swallowing and applies them surgically, pharmacologically and behaviorally in order to be able to draw and perform the strategy of the therapy in the field efficiently.
- . Collects complete, clear and organized information about the patient's ailments in order to be able to analyze it and formulate a preliminary idea concerning the etiological diagnosis of ailments.
- . Analyses the speech (verbal) message of the patient concerning voice, phonology, semantic, syntax, and morphology in order to be able to describe precisely the type and degree of pathological aspects of communication.
- . Analyses and relates the results of all different items of the battery of investigations in order to reach at an etiological diagnosis and possible differential diagnosis utilizing his/her theoretical background that draws charts for different groups of ailments in the field of phoniatics.
- . Outlines the role of pharmacological therapeutic agents in treatment of diseases of voice, speech, language and swallowing in order to be able to describe them when needed.
- . Recognizes the methods of voice therapy in order to criticize the efficiency and pitfalls of each.

- . Grasps the principles of behavior therapy in order to introduce efficiently these measures in the therapeutic programs given to patients.
- . Grasps the principles of general language stimulation in order to be able to give efficient family guidance programs to help families that have children with delayed language development to participate efficiently in the therapeutic program.
- . Grasps the principles of language rehabilitation of dysphasic patients in order to include it efficiently in the comprehensive rehabilitation program for these patients, including family guidance.
- . Grasps the principles of language rehabilitation for the hearing impaired patient in order to include it efficiently in the comprehensive program for rehabilitation of the hearing handicapped.
- . Identifies the role of prosthetic devices and aids in the therapeutic program for diseases of voice, speech, language and swallowing in order to be able to use it efficiently when indicated.
- . Acquaints himself with the methodology of scientific research in the field of voice, speech, language and swallowing disorders in order to carry out efficiently academic and field research work.
- . Assess the developmental milestones of children and classify their different types of disabilities.
- . Recognizes high risk children for disabilities and determine the degree of handicap.
- . Determines the cause of the neurological deficit in the domain of phoniatic disorders and selects the proper investigation and interpretation of radiological findings (CT and MRI of the brain).
- . Interprets the electroencephalogram (EEG).
- . Outlines the role of pharmacological therapeutic agents in treatment of endocrine diseases related to voice, speech, language and swallowing in order to be able to describe them when needed.
- . Outlines the role of pharmacological therapeutic agents in treatment of epilepsy and other pediatric neurological disorders.
- . Outlines the selection criteria for management of velopharyngeal insufficiency.
- . Determines the surgical procedure for velopharyngeal insufficiency patients.
- . Outlines the role of Orthodontics and prosthodontics agents in treatment of diseases related to speech and swallowing in order to be able to describe them when needed.

### ج - المهارات العملية:

- . Examines patients with disorders of voice, speech, language and swallowing clinically and instrumentally and performs related formal tests on those patients in order to reach detailed etiological diagnosis and suggests prognosis.
- . Examines the ear, nose, pharynx and larynx as well as the nervous system efficiently in order to detect organic changes and evaluate its significance and in order to associate between these signs and the symptomatology collected previously.
- . Examines the larynx by means of stroboscope in order to study vocal fold's vibration during phonation and to detect the pathological picture of these vibrations and its significance.

- . Performs the available standardized psychological tests in order to draw a diagnostic profile for the various perceptual, affective, social, cognitive aptitudes as well as the performance abilities of the patients.
- . Carries out the various measurements and investigations using the available instrumental diagnostic procedures in order to support the preliminary diagnosis objectively.
- . Practices micro-laryngoscopy in order to be able to perform efficiently the necessary micro laryngeal surgical procedures on the vocal folds and the larynx in general.
- . Practices rehabilitation methods for speakers' and singers' voice.
- . Practices rehabilitation methods for nasality.
- . Practices rehabilitation of the laryngectomized patients.
- . Practices habilitation methods in delayed language development.
- . Practices rehabilitation methods for the correction of articulation errors.
- . Practices rehabilitation methods for learning disabilities.
- . Practices rehabilitation methods for stutterers and clutterers.
- . Practices rehabilitation methods in dysphasia and aphasia.
- . Practices rehabilitation methods in dysarthrias.
- . Practices rehabilitation methods in oro-pharyngeal dysphagias.
- . Practices habilitation for hard of hearing children, including auditory training and habilitation of cochlear implantee.

#### د- مهارات الاتصال:

- . Communicates effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.
- . Cooperates with disciplines related to disorders of voice, speech, language and swallowing in order to participate in teamwork necessary for the proper management of those patients.
- . Conveys his/her ideas to specialists in other disciplines in order to be able to function effectively in a group.
- . Identifies the capacities and limitations of the other medical specialties participating with him/her in the clinical teams in order to be able to put effectively an integrated, realistic therapeutic program.
- . Practices the activities of group interaction in order to be able participate efficiently in the activities of the clinical teams.
- . Apply principles of medical ethics in dealing with patient information by keeping patient privacy and confidentiality even with multi-personnel accessibility to patient data.
- . On the basis of the knowledge, competence, and skill he has acquired during his training, a phoniatician must also be prepared to fulfill the following important tasks:

رئيس قسم الأذن والأنف والحنجرة

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