



UNIVERSITÀ
DEGLI STUDI
FIRENZE

NEUROFARBA
DIPARTIMENTO DI NEUROSCIENZE,
PSICOLOGIA, AREA DEL FARMACO
E SALUTE DEL BAMBINO



Associazione "Lapo" ONLUS

Associazione Italiana Famiglie, Enti e Professioni
contro le Malattie Neurologiche e Psichiatriche dell'Età Evolutiva

UNIVERSITY MASTER

IN ANIMAL-ASSISTED INTERVENTIONS:

THERAPEUTIC RIDING

Academic Years 2020/2021- 2021/2022

Xth Edition

PROGRAMME

Note:

TR= Therapeutic Riding

EAAT= Equine-Assisted Activities and Therapies

EAI = Equine-Assisted Intervention,

EFI= Equine Facilitated Intervention

TR, EAAT, EAI, EFI have an equivalent meaning.

AAI= ANIMAL ASSISTED INTERVENTION is a goal oriented and structured intervention that intentionally includes or incorporates animals in health, education and human service (e.g., social work) for the purpose of therapeutic gains in humans. It incorporates human-animal teams in formal human service such as Animal Assisted Therapy (AAT), Animal Assisted Education (AAE) or under certain conditions Animal Assisted Activity (AAA)». IAHAIO White Paper 2014, updated for 2018.

ANIMAL ASSISTED INTERVENTION according to National Guidelines in AAI

Aim: to know the principles of AAI, their main disciplines, the animal species involved, the areas of intervention, the basis of human-animal relationship, bioethical principles, animal welfare, role of the multidisciplinary team, planning of the intervention

Programme

History of Animal-Assisted Interventions (AAI) and definition of AAT, AAE; AAA

Guidelines: national and international legislative framework also relating to Animal welfare protection

Animal species committed in AAI, their needs and ethological characteristics

Fundamentals and characteristic of the human-animal relationship

Intraspecific and Interspecific Communication, in particular with the horse

Ethic of the human-animal relationship. The animal welfare in AAI

Health Protocols of the animal used in AAI

Roles and responsibilities of the Professionals and Operators involved in the multidisciplinary Team

Multidisciplinary Team and AAI: contribution of the different animal species as a partner of the Help Relationship, roles and cooperation criteria between the Person in Charge, the multidisciplinary team and the team animal handler- animal

AAI according to the bio-psycho-social model

AAI and their specific areas of interventions

AAI planning, in particular with the horse

Planning of an educational intervention and protocol of intervention in the educational area

Planning of a therapeutic individualised project and practical-theoretical classification of the users

Monitoring tools of the sessions and evaluation of the user in AAT/AAE

Evaluation of the AAT/AAE effectiveness

International Classification of Functioning, Disability and Health (ICF) for the assessment of the results

Animal behavioural evaluation: techniques and methodological problems

Neurophysiological and neuro-psychological basics in AAT, in particular in TR

NEUROPSYCHIATRY

a) NEUROLOGY, in particular Child Neurology

Aim: to know the basic of anatomophysiology of the Nervous System; the development of NS from the neonatal competences to the antigravity competences: analysis of the archaic postural and motor patterns, extragravity patterns, of their functional meaning for the newborn and of their persistence in the neuromotor disorders; analysis of the antigravity patterns and balance during the normal development. Functional pictures and symptoms in Neuromotor Disorders: spasticity, dystonia, ataxia; mixed forms. Neuromotor development in different type of Cerebral Palsy. To know the difference between motor delay and motor dysfunction. To know the main types of non-progressive and progressive Neuromotor Disorders (post-traumatic, Degenerative Disorders, etc). To know the symptomatology and the main clinical syndromes of Spinal Cord Diseases To know the main Sensoryneural Disorders, hearing and visual impairment, and the principles of rehabilitation.

Programme

Notes of Anatomophysiology of the Nervous System

Development of the Nervous System and its alterations

Fetal motor behaviour and its functional interpretation. Neurophysiological and clinical implications

Neuromotor Development

Developmental motor delay and clumsiness

Functional pictures in Neuromotor Disorders: spasticity, dystonia, ataxia; mixed forms

Cerebral Palsy

Malformations and Genetic Disorders

Post-traumatic, Post-infectious Diseases, vascular disorders, etc.

Neurological progressive diseases

Demyelinating disorders

Specific Neurological disorders: Dyspraxia, Dysphasia, Aphasia

Neuromuscular Diseases

Epilepsy and non-epileptic seizures

First aid

SPINAL DISORDERS

Spinal cord disease. Physiopathology. Clinical syndromes

Congenital and acquired diseases

Psychopathological aspects

Principles of rehabilitation in spinal cord disorders

TR indication and contraindications in the different spinal cord disorders

SENSORYNEURAL DISORDERS

Hearing impairment

Rehabilitation in language disorders

Visual Impairment

Oculomotor and gaze impairment

Rehabilitation in profound low vision and in blindness

Orientation courses. Clinical cases

b) ORTHOPAEDICS

***Aim:** to know the main orthopaedic problems in particular in Neuromotor Disorders, mostly in Cerebral Palsy, also refers to TR (indication and contraindications)*

Programme

Principles of kinesiology and biomechanics
Neuro-orthopedic disorders in childhood and adolescence
Scoliosis. Hip disorders
Osteoarticular and muscular system involved in TR
TR Indications and contraindications

c) NEUROPSYCHOLOGY AND PSYCHOPATHOLOGY

***Aim:** to know the psychological, cognitive, language development.*

To know the characteristics of Intellectual Disability, NLD, SLI, Psychiatric disorders in particular of childhood and adolescence, Borderline Disorders.

To know the keys of interpretation of behaviour in the psychopathology of childhood and the basic principles for a correct reaction and action.

To know the causes and behaviours of social differences and deviance.

Programme

Psychological development
Cognitive development
Language development
Intellectual Disability
Non-verbal Learning Disorder (NLD) and Specific Language Impairment (SLI)
Psychopathology of childhood and keys of interpretation of behaviour
Adolescence: general characteristics. Crisis and decompensation during the growth path
Psychopathology of Intellectual Disability
Psychiatric disorders in childhood: Anxiety Disorders; ADHD, Autism Spectrum Disorders (ASD)
Borderline Personality Disorders (BPD)
Eating Disorders
Social Difficulties and Deviance
Psychiatric Disorders in Adult

d) REHABILITATION

***Aim:** to know the meanings of disability and handicap and their impact on the subject, parents, society.*

To know the principles of rehabilitation in neurological and psychiatric disorders

To know how to set up a planning rehabilitation project; guidelines; observation techniques

Programme

Impairment - Disability - handicap
Principles of Rehabilitation
Guidelines in the treatment in childhood
Rehabilitation project
Observation techniques in neurological disorders
Principles of the treatment in neurological disorders: ways and times
Physiotherapeutic treatment: general principle

Aids

Psychiatric observation techniques and treatment principles in psychopathology
Observation criteria in Psychiatric Rehabilitation

EAAT/TR

***Aim:** to know the evolution of the definition TR/EAAT or EFI and their disciplines also including Sports for the Disabled with its disciplines, the international organisation, the functional classification system.*

To know the principles of treatment of the neuromotor disorders (spastic, dystonic, ataxic, mixed disorders), intellectual disability, NLD, SLI, psychiatric disorders, deviance and social difficulties and the TR specific setting.

To know the different methodological approach and treatment; individual or group riding sessions; integrated activity; groundwork; on horseback: mounting and dismounting techniques, planning and methodology of managing the session, exercise criteria, based on symptomatology.

To know the guiding principle in choosing the horse, horse tack and aids.

To know the main method for monitoring and evaluation of EAAT outcomes; Video recordings techniques and editing, Assessment Scales.

To know general aspects as indications, contraindications, precautions; structures, equipment, aids, environmental adaptations; EAAT/TR Team: roles and responsibility of the various involved Professionals; organisation and management of a EAAT Centre, insurance, medical-legal and management aspects; relationship with Organisations, Institutions.

Programme

Definition of EAI, EAAT, TR and their disciplines

Vaulting: groundwork and on a vaulting barrel; competitive, therapeutic, interactive vaulting

Sport for the disabled; functional classification, competitive activity; paralympic activity

Equestrian Sports for People with Intellectual Relational Disabilities (DIR), SOI

Therapeutic Carriage Driving; Para-driving

Para-endurance

THE SUBJECT AFFECTED BY NEUROMOTOR DISORDERS ON HORSEBACK

General principles

TR treatment setting in spasticity, dystonia, ataxia and in mixed disorders

TR treatment setting in neuromuscular disorders

TR treatment setting in dyspraxia, in clumsiness

Epilepsy and EAAAT/TR

Clinical cases

Analysis and discussions of Videorecordings

THE SUBJECT AFFECTED BY MENTAL DISORDERS ON HORSEBACK

General principles of the EAAT/TR treatment in Mental Disorders

TR treatment setting in subject affected by Intellectual Disability

TR treatment setting in subject affected by ADHD

TR treatment setting in subject affected by Autism Spectrum Disorders (ASD)

TR treatment setting in subject affected by Borderline Personality Disorders (BPD)

TR treatment setting in subjects who live in residential facilities

TR treatment setting in adult affected by psychiatric disorder

Clinical cases

Analysis and discussions of Videorecordings

EAAT/TR METHODOLOGY

General aspects

Mounting and dismounting methods; sitting backward technique; backriding technique

Planning and management of the session

Exercises: criteria and application procedure based on the symptomatology

The horse's tack

Individual and group riding lessons

Performance, show, carousel

Pre sport and sport for the disabled

Integrated activity

Application of the EAAT/TR methodology to neuromotor disorders

Application of the physiotherapeutic principles to TR, particularly to Hippotherapy

Approaching, methods of mounting, conducting TR lesson, dismounting in spastic, dystonic, ataxic, mixed disorders, in spinal cord and neuromuscular disorders

Choosing the horse's tack according to the symptomatology and the target

Application of the EAAT/TR methodology to mental disorders

Approaching, methods of mounting, conducting TR lesson, dismounting in mental disorders

Choosing the horse's tack according to the symptomatology and the target

EAAT/TR methodology in multiple disability

Groundwork

MONITORING AND EVALUATION OF EAAT/TR OUTCOMES

Scheduled discussions of the Team

Modality and monitoring tools of the sessions

EAAT/TR assessment criteria in mental disorders

EAAT/TR assessment criteria in neuromotor disorders

Presentation and evaluation of subjects

VIDEORECORDINGS TECHNIQUES and EDITING

ASSESSMENT SCALES

General criteria for the evaluation of EAAT/TR outcomes

"TR Neuromotor Disorders Assessment Scale"

Clinical cases

Exercises in the Assessment Scale application

CONTEXT

EAAT/TR in the rehabilitative project

EAAT/TR as an integration modality for the subject with handicap

EAAT/TR as a socio-educational resource in Social Difficulties

Institutionalisation and EAAT/TR

Rehabilitation Services and EAAT/TR

GENERAL ASPECTS

EAAT/TR indications, contraindications, precautions

Structures, equipment, aids, environmental adaptations

EAAT/TR Team: roles and responsibility of the involved Professionals

Role and functions of the Medical Specialist of the EAAT/TR Centre (Project Manager)

Role and functions of the Veterinary in the AAI projects and specifically in an EAAT/TR Centre

Role of the Horse Handler and his position in the AAI setting

The role of the Riding Instructor in the EAAT/TR setting
Volunteers

Choosing the horse for EAAT/TR (conformation, character, quality of its gaits and movements, training)

Training and management of the horse chosen for EAAT/TR

Selecting a horse based on conformation and quality of its movements according to the neuromotor or mental symptomatology of the subject and to the target

National and regional legislation in social and health field

EAAT/TR: insurance, medical-legal and management aspects

Organisation and management of an EAAT/TR Centre

Management regulations of an EAAT/TR Centre and an Equestrian Centre with EAAT/TR activity

Relationship with Organisations and Institutions

International Organisations: HETI; PATH Intl; FEI, IPC, IPEC, SOI

FISE Integrated Equestrian Department and Para-equestrian Department

EQUESTRIAN AND EQUINE VETERINARIAN PROGRAMME

a) HORSE, HORSE RIDING AND HORSE MANAGEMENT

Aim: Horse/Human Interaction. Horse management. Basic concepts of biomechanics and biodynamics of the horse. Gaits; horse's tack. Seat-Position-Aids. Techniques of riding and vaulting; brief reference to carriage driving; Organisation and rules concerning the Equestrian Sports.

Programme

History of the horse in relationship with human beings and notes on the history of riding

Basic concepts of biomechanics and biodynamics of the horse

Gaits – Balance - “balancing pole”

Horse's tack – Bridles – Bits

Seat – Position – Aids

Horse Riding Techniques

Interaction between horse and rider in a normal and in a disabled subject

Horse/rider relationship and the role of the Riding Instructor

Horse management and training

Work in the arena

Flatwork

Notes on the jumping work

Notes on the work on the varied ground: countryside work

Training of the unriden horse

Notes on Carriage driving and Therapeutic Carriage Driving

Endurance and para-endurance

Workshop: Vaulting (one week), Integrated Vaulting: methodology, practical application

Management and work with ponies. Games

Management of the horse

Management of the stable

FISE Regulation and Disciplines

Sports law

Workshop (one week): **Sport Riding for the Disabled**

Workshop (one week): Management of the horse, longeing, riding lessons

b) EQUINE VETERINARIAN SCIENCES

Aim: ethology, human-animal relationship, anatomy, physiology, morphology, main horse diseases, welfare; analysis of horse's movement in relation to his morphology and the different gaits; criteria for choosing and managing the horse for EAAT.

Programme

Ethology and welfare of the animal
Evolution and behaviour of the horse
Anatomy, Physiology
Elements of biomechanics and biodynamics
Analysis of the horse movements at the different gaits
Notes of farriery
Horse gaits, biomechanics in relationship with EAAT/TR
Horse vision
Morphology
Signaling
Breed
Nutrition
Diseases of the digestive, musculoskeletal, cardiorespiratory system
“Vices”; preventions of behavioural disorders