

DISTANCE LEARNING

IN PAEDIATRIC NEUROLOGY

www.bpna.org.uk/DL

The British Paediatric Neurology Association's paediatric neurology distance learning course is designed to complement clinical training. The course is constantly updated, offering a comprehensive theoretical background in paediatric neurology.

The whole course is suitable for paediatric neurology trainees and individual units provide an opportunity for established paediatric neurology consultants and general paediatric consultants to update themselves on a particular topic as part of their Continuing Professional Development. CPD points are awarded for each Unit completed.

Read inside to find out what the course covers and what students enrolled on the course say about it.....



BPNA

British Paediatric Neurology Association

Bridge House, Harrow Road, Bolton, BL1 4NH, England
Tel: +44 (0)1204 492888 Email: info@bpna.org.uk

COURSE CONTENT

Unit 1: Introductory Unit starts with an introduction to how you learn, and how you might approach this Distance Learning programme. The majority of the unit then covers some broad principles which underpin the practice of paediatric neurology, including rehabilitation, imaging of the neurological system and genetics.

Unit 1: "...the best thing for me was the Evidence Based Medicine. Earlier I knew only superficially about EBM but this opened up a whole new world."
Uzbekistan

Unit 2: Embryology, disorders of neuro-embryogenesis, hydrocephalus and neonatal neurology - we will be studying the biological processes involved in brain development. We will then go on to see how environmental and genetic disorders may have an adverse effect on that process. We will see how the neuroimaging and neurophysiology of newborns benefit initial assessment and how that relates to prognosis. Throughout the unit we shall reflect on how we might most effectively communicate our thoughts to the families involved.

Unit 2: "I was able to put my knowledge from this unit into practice when looking at an MRI scan of a child with presumed perinatal stroke and looking for signs of gliosis compared with porencephaly and thinking what this might mean in terms of when the stroke occurred". UK

Unit 3: Development and Learning introduces the normal development of the central nervous system after the neonatal period and up until adult life. The relationship between this

maturation and the behaviour observed in the infant and child is discussed. The unit then continues with coverage of the cellular mechanisms of learning and the effect of experience on synaptic plasticity. The remainder of the unit addresses the development of communication, motor skills and cognitive development and their associated specific disorders. The unit includes the broad principles of developmental assessment and intervention.

Unit 3: "The basic sciences with respect to development was fascinating." UK

Unit 4: Central motor deficits; congenital and acquired spinal cord disorders should help familiarise you with the commonest motor disorders of childhood and will take you through neural tube disorders, cerebral palsy and acquired motor dysfunction. For each disorder you will be taken through the case of a child, or several children, and you should try to identify similar cases in your own practice with which you have had personal involvement.

Unit 5: Development and function of the peripheral nervous system and neuromuscular disorders covers the full spectrum of neuromuscular disease. It will provide up to date information on how growing knowledge of molecular genetics has contributed to our rapidly expanding understanding of these disorders and changed diagnostic strategy. Access to a busy neuromuscular service will bear witness as to how this knowledge is put into practice and a number of sections are devoted specifically to intervention.

Unit 6: Membranes, channels, epilepsy and paroxysmal disorders - the largest group of conditions studied will be epileptic seizure disorders/the epilepsies. The overall aim is to provide you with an understanding of the physiological basis of seizure disorders and their epidemiology, along with the detailed clinical knowledge necessary to manage children with seizure disorders to an advanced (tertiary) level. At the end of the whole Unit you should be adept at using the International Diagnostic Scheme, be able to describe the electroclinical features of the different types of epileptic seizures, be able to identify common and not so common epilepsy syndromes and have a good knowledge of the various diseases and condition in which epileptic seizures may occur. You will consider the role of EEG, neuroimaging and other investigations in the evaluation of children with seizure disorders. A number of sections deal with treatment issues, including antiepileptic drugs, epilepsy surgery and less conventional / well established treatment modalities, such as vagal nerve stimulation. The effect of epilepsy on the

Unit 6: "...videos were outstanding, very clear and to the point. One picture is worth a thousand words." Saudi Arabia

Unit 6: "Fantastic unit, congratulations on producing such a good resource for learning." UK

individual, including co-morbidities will also be considered. Epileptic seizure disorders are often confused with non-epileptic paroxysmal disorders: you will review the differential diagnosis of paroxysmal disorders including the Headache Disorders of Childhood.

Unit 7: Cerebrovascular disease, trauma and coma - you will be learning about some acute neurological conditions, namely coma, trauma and cerebrovascular disorders. All of these are extremely common conditions in neurological practice; hopefully you will find yourself better equipped to deal with them once you have worked through this Unit. We will start by going over some principles of anatomy and physiology relevant to both of these disorders and then consider the epidemiology, clinical features and management of each of these in turn. You will be referring back to the principles of brain imaging and rehabilitation covered in Unit 1.

Unit 8: Inflammation and infection of the nervous system explores the mechanisms of inflammation within the CNS, examining the role of the immune system in the control and modulation of infection and inflammation and the impact of immune dysregulation and immune deficiency. Infection processes are examined in detail to develop an in depth knowledge of meningitis, encephalitis, brain abscess as well as sections on specific pathogens which may be less common but very important including TB, HIV and prions. Prevention is better than cure so finally an overview considers immunisation, infection control and public health measures to prevent CNS related infection.

Unit 9: Metabolic, Nutritional and Systemic Disease - ultimately all conditions are metabolic. In this unit we shall concentrate on those disorders determined by primary metabolic disorders, an increasing number of which have been elucidated genetically. We shall learn how clinical acumen can increase the suspicion of a neurometabolic disorder. We shall consider the classification of these disorders and how that can help a rational approach to investigation. As usual we shall consider how information on these conditions, often complex, can be relayed to the families involved.

Unit 9: "It was mostly hard but covered a lot of things it was time I got round to thinking about." UK

Unit 10: Vision, Hearing and their Disorders – the first half of the unit covers vision and during this section of the Unit you will develop an understanding of the principles behind vision and visual disorders and their management and investigation. The latter half of the Unit deals with hearing and by the end of the Unit you will have a detailed knowledge of the auditory system, its associated disorders and management.

Unit 11: Neuro-oncology - the first two sections provide an overview of the epidemiology of central nervous system tumours in childhood and an introduction to tumour biology. The remainder of the unit is more clinically based. Four sections are devoted to the clinical effects of tumours and the methods we use for diagnosis and for surveillance following diagnosis. Four sections deal with management, the neuro-toxic effects of treatments and the late effects which are so important in young people with central nervous system tumours. Paraneoplastic syndromes, principally the Dancing Eye Syndrome, are covered in one section and the unit finishes with an overview of palliative care.

Unit 12: Psychological Development, Psychiatric Disorder, Communication, Learning Disability and Service Networks - you will explore the two principal approaches to the classification of psychiatric disorders – the WHO ICD-10 and the American DSM-IV. The Unit will cover developmental psychology, learning disability (causes, genetics, classification, measurement, management), pervasive developmental disorders, childhood psychoses, depression, conduct disorders and disorders of attention. The Unit concludes with sections on Children's Rights and the ethical and legal issues surrounding consent and treatment, and an exploration of the consultation process and partnership working.

GENERAL INFORMATION

The course is written in English and is accessed via the internet. All the necessary papers are available for you to download from the course website. You will also need access to a few textbooks and clinical case notes. Please download the full list of the resources you will need to arrange locally for the course

<http://www.bpna.org.uk/includes/doclibdownload.php?10> or email diane@bpna.org.uk

Who is the course for?

Paediatric Neurology trainees would benefit from completing the whole course. Individual units provide the opportunity for Consultant Paediatric Neurologists and Consultant General Paediatricians with an interest in neurology to update themselves on particular topics as part of their continuing professional development. Trainees in other sub speciality areas may be interested in specific units too.

What do I need before I apply for this course?

As a paediatric neurology trainee you will need two things before you apply for the course:

- An Educational Supervisor, usually a Paediatric Neurologist colleague. Your supervisor will facilitate access to local resources that you need to complete the course and meet with you regularly to discuss your progress. There is more information specifically for Supervisors available at our website <http://www.bpna.org.uk/distancelearning/doclibdownload.php?15> . An online introduction for international educational supervisors is available - access to this may be requested at any time, please email diane@bpna.org.uk
- Regular access to paediatric neurology clinics. The distance learning course is designed as a teaching package to complement the clinical training. The course relies on you seeing adequate clinical material, indeed many of the activities you will be asked to complete involve reflecting on and reviewing cases you have seen and using experience gained in clinics.

As a Consultant, you are not required to have an educational supervisor, however you will need access to clinical material.

How long will it take me to complete the whole course?

We would hope that you would work through it at a rate that is right for you, maintaining a balance between momentum and enjoyment. Therefore, students will complete the course at differing rates depending on their personal circumstances however you should aim to complete the whole course in 2-4 years.

How much does the whole course cost?

Course costs vary according to World Bank economy classifications (January 2011). If your country is not listed, please email diane@bpna.org.uk.

Bangladesh, Kenya, Kyrgyz Republic, Montenegro, Tajikistan, Uganda	Total = £590 (GBP) Initial payment £148
Albania, Bosnia & Herzegovina, Brazil, Bulgaria, China, Egypt, Georgia, India, Iraq, Jordan, Kazakhstan, Lithuania, Macedonia, Moldova, Romania, Russian Federation, South Africa, Sudan, Syria, Turkey, Ukraine	Total = £1100 (GBP) Initial payment £275
Australia, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Israel, Italy, Latvia, New Zealand, Norway, Oman, Poland, Switzerland, United Kingdom, United Arab Emirates, United States of America	Total = £1850 (GBP) Initial payment £463

Please note course fees are applied according to the country of employment. Payments are made in four instalments over a 2 year period. The initial payment (25%) of full course fees is payable before the course commences.

Individual unit fees are available online at <http://www.bpna.org.uk/distancelearning/doclibdownload.php?11> or email diane@bpna.org.uk.

When can I start?

International students are accepted throughout the year to start the course on 1 January, 1 April, 1 July or 1 October. To join the next group, please download and complete the application form available at www.bpna.org.uk/DL.

I am a Consultant and interested in just doing one or two units....

Excellent! Most units cost £295, the epilepsy unit is £395. You can begin at any time and there is no time limit to finish the unit. We will send you a CPD certificate for every section you complete (usually 3-4 points per section, totalling 48 points per unit – 96 for the epilepsy unit). Simply download and complete the application form at www.bpna.org.uk/distancelearning/apply.php

FURTHER INFORMATION

Please ring Diane on +44 (0)1204 492888 or email diane@bpna.org.uk.