

# **ARTICLE**

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First received 11 Nov 2022 Final revision 8 Jun 2023 Accepted 10 Jun 2023

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# Training matters: neurodevelopmental disorders in psychiatric practice

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#### **SUMMARY**

Traditionally, service provision for neurodevelopmental disorders such as attention-deficit hyperactivity disorder, intellectual disability and autism - where this has been available - has focused on the needs of children, but there is now increased understanding of neurodevelopmental disorders as lifelong conditions, often with an ongoing need for health and social care provision. Medical and allied professionals frequently report limited education in neurodevelopmental disorders both during their training and post-qualification. This article gives an overview of theoretical and practical considerations for training of psychiatrists and allied healthcare professionals in relation to neurodevelopmental disorders. Key UK policy drivers and capability frameworks pertaining to this training are discussed. The Royal College of Psychiatrists' 2022 revised curricula for medical trainees in psychiatry are examined in relation to neurodevelopmental disorders and ongoing CPD requirements in this area for career psychiatrists are considered. A brief overview of multidisciplinary training in neurodevelopmental disorders and the role of the psychiatrist in this is discussed. An international perspective on training in this area is touched on and current challenges in low- and middle-income countries are outlined. Last, the future direction of training in neurodevelopmental disorders is considered.

#### KEVWORDS

Neurodevelopmental disorders; autism; attentiondeficit hyperactivity disorder; intellectual disability; training.

# **LEARNING OBJECTIVES**

After reading this article you will be able to:

- understand the key policy and training frameworks relevant to neurodevelopmental disorders in the UK
- describe the current UK training requirements in neurodevelopmental disorders for psychiatrists

 consider your own CPD training needs in neurodevelopmental disorders and be aware of key resources and training opportunities to address these

This article gives an overview of key training issues in relation to neurodevelopmental disorders. We will focus on autism, attention-deficit hyperactivity disorder (ADHD) and intellectual disability as the neurodevelopmental disorders that present most commonly to psychiatrists and have the best-established training pathways available. We do, however, acknowledge that this is not an exhaustive list of conditions.

Health professionals and in particular psychiatrists, by virtue of their training pathways and the settings in which they work, may take a more biomedical view of neurodevelopmental disorders and this can have benefits. For example, a medical perspective allows for assessment of neurodevelopmental disorders alongside consideration of differential diagnoses and comorbidities, some of which (e.g. obsessive-compulsive disorder) may require psychiatric treatment in their own right. What is common to all neurodevelopmental disorders is that they are lifetime conditions associated with poor health outcomes but also with strengths and a wide range of presentations (Hirvikoski 2016; Cassidy 2022). When people with neurodevelopmental disorders present to health services, the complexity of appropriate management requires training and expertise. In this situation a medical approach and use of standardised diagnostic terminology may be useful, not least as a shared language. However, clinicians also need an awareness of differing views on the use of such terminology.

Training in neurodevelopmental disorders, and in particular intellectual disability and autism, is a current focus in the UK across the health and social care sectors. The Oliver McGowan Mandatory Training in Learning Disability and Autism is a standardised programme rolled out in this regard (Health Education England 2020). It is worth distinguishing between general training that should be available across all sectors of society with a focus on reasonable

adjustments and additional more specialist training necessary, for example, in certain healthcare settings such as psychiatric in-patient units. Specialist neuro-developmental disorders training will be the key focus in this article, although we will also make reference to the former.

# **Terminology**

As a starting point to discussing training, some understanding of the language used to describe neurodevelopmental disorders and its context is important, as diagnostic terminology may differ between settings and conditions.

Debate on the terminology used to describe intellectual disability continues. Although the term learning disabilities is still commonly used across health and educational organisations, particularly in the UK, ICD-11 (World Health Organization 2019) now uses the term 'disorders of intellectual development' (DID) and DSM-5 (American Psychiatric Association 2013) uses the term intellectual developmental disorder (IDD). We will use the term intellectual disability in this article as being the one most commonly used in everyday clinical practice in the UK, except when making reference to specific publications and training programmes that still stipulate the use of the term learning disability.

The term attention-deficit hyperactivity disorder is more universally accepted and this is reflected in the decision to switch from the term hyperkinetic disorders in ICD-10 (World Health Organization 2019) to ADHD in ICD-11 (World Health Organization 2019), aligning it with DSM-5 (American Psychiatric Association 2013). Despite this, controversy over the clinical validity of ADHD still exists in some quarters (Young 2021).

Terminology related to autism remains widely under scrutiny and debate. Most autistic people are reported to prefer identity-first terminology (autistic person rather than person with autism), although this preference is not universal. The concept of a 'disorder' is strongly resisted by many autistic people, although it may be useful to some and is used in diagnosis.

We use the term disorder in this article and cover neurodevelopmental disorders together because they are grouped together in DSM-5 and ICD-11, have some shared genetic and pathophysiological underpinnings, some phenotypic overlap and sometimes co-occur (Morris-Rosendahl 2020; Posner 2020). Psychiatrists are trained in diagnostic categories and focus on disorders, but it is essential to understand that many organisations and people with neurodevelopmental disorders (especially autism) would like to move neurodiversity from

the clinical domain to the social domain. They would argue that many clinical presentations that occur in autistic people would not occur if society was better at making reasonable adjustments.

# **Policy context**

The past 15 years have seen an increasing focus on improving the quality of health and social care support for autistic people and people with intellectual disability in the UK. National policies and programmes of work have been introduced to support this. Improving the quality and reach of training has been an important element of this narrative. For example:

- The Autism Act 2009 put a duty on the government to produce a strategy for autistic adults in England, including statutory guidance on training for all front-line public service staff in line with their job role, and developing specialist training for staff in health and social care.
- The Learning Disability Mortality Review (LeDeR) Programme (leder.nhs.uk) was set up in 2015 by the UK Government in response to concerns about health inequalities and avoidable adverse incidents for people with intellectual disability. It now also covers autistic people without intellectual disability. Its second report (Department of Health and Social Care 2018) included a commitment to consult on proposals for mandatory intellectual disability and autism training and recommended that mandatory intellectual disability training should be provided to all staff, delivered in conjunction with people with intellectual disability and their families.
- Right to be Heard (Department of Health and Social Care 2019) was the Government's response to the consultation on intellectual disability and autism training for health and care staff. It found overwhelming support for the principle of mandatory training.
- The Building the Right Support action plan (Department of Health and Social Care 2022) brought together measures on building on specialist training on intellectual disability and autism for health and care staff.
- The Health and Care Act 2022 places a legal requirement on all regulated health and social care service providers to train their staff on intellectual disability and autism. The Government is also required to publish a Code of Practice to provide guidance on how to meet this new legal requirement – at the time of writing this is still being developed.

## **Training frameworks**

Training in neurodevelopmental disorders can be approached from different perspectives, for example:

- diagnosis (autism, intellectual disability, ADHD)
- degree of complexity (single versus multiple diagnoses, additional needs, such as forensic)
- sector (health, education, social care, criminal justice, etc.).

There are advantages and disadvantages for both more and less bespoke forms of training. However, we would argue that there is clear benefit of having minimum standards of training in recognition and making reasonable adjustments across all sectors of society, not least as a step towards equitable provision of care and support.

# Intellectual disability and autism training

In England the Core Capabilities Framework for Supporting People with a Learning Disability (Health Education England 2019a) and its counterpart, Core Capabilities Framework for Supporting Autistic People (Health Education England 2019b), have set out training expectations for healthcare staff regarding intellectual disability and autism. Aims include informing curricula design and delivery of education and training programmes, supporting the assessment of capabilities and the sharing of learning and outcomes across the whole workforce. Both frameworks set out a range of capabilities, grouped into five domains, listed in Box 1.

Capabilities are defined in three tiers, with Tier 1 providing general awareness, Tier 2 for those who may need to provide care and support for autistic people or people with intellectual disability, and Tier 3 for staff with a high degree of autonomy providing care in complex situations. Guidance is provided for employers to help ensure staff receive the appropriate level of training according to their

BOX 1 Health Education England's Core Capabilities Frameworks in intellectual disability and autism: domains

- (a) Understanding intellectual disability/understanding autism
- (b) Health and well-being
- (c) Personalised care and support
- (d) Risk, legislation and safeguarding
- (e) Leadership and management, education and research (Health Education England 2019a, 2019b)

role. The expectation for those at Tier 3, which includes psychiatrists, is that their existing training will cover much of the capabilities they need.

# Tier 1 and 2 provision

The Oliver McGowan Mandatory Training in Learning Disability and Autism (Health Education England 2020) is a standardised training programme developed to meet the Health and Care Act 2022 requirement. It is named after Oliver McGowan, whose death shone a light on the need for health and social care staff to have better training. Co-production and involvement of people with lived experience is a key part of the training programme. The pilot has received positive feedback. The programme is aligned with Tier 1 and 2 capabilities of the Core Capabilities Frameworks and is designed to be offered across sectors. It must be noted that the programme provides training in autism and intellectual disability together (National Development Team for Inclusion 2022), an approach that would need further consideration for Tier 3.

# Tier 3 provision

Within Tier 3 the necessary capabilities are likely to vary between sectors, for example healthcare versus social care versus the criminal justice system. It is at this level of complexity that role-specific training for the healthcare sector in diagnosis and recognition of the full range of needs associated with neurodevelopmental disorders may have real value. The full range of capabilities should be represented within a multidisciplinary clinical team; all capabilities are important, but in psychiatry (where professional training brings with it valuable background knowledge) more emphasis may be placed on certain capabilities, for example within the Core Capabilities Framework for autism, Capability 2 addresses identification, assessment and diagnosis of autism, Capability 12 physical health and Capability 13 mental health (Health Education England 2019b). Box 2 illustrates some of the complexities that may be encountered in clinical practice with neurodevelopmental disorders that would fall within these capabilities. Such complexities may be encountered in a range of psychiatric specialties, but bespoke training for psychiatrists working in services for people with neurodevelopmental disorders or dealing with their more complex health presentations is also needed.

At present it is difficult to find any courses or qualifications with this degree of both breadth and depth. A gap analysis of current provision found that provision at Tier 3 tends to be generic and not designed for particular professions or specialist services (Maudsley Learning 2021). Specialist

professionals working in autism teams currently acquire capabilities by sharing knowledge, for example through the Community of Practice Groups in the Royal College of Psychiatrists' (RCPsych's) Neurodevelopmental Psychiatry Special Interest Group (2023), but there is a need for more specialist training to be developed.

#### **ADHD**

To date there has been less national emphasis on training in ADHD in comparison with intellectual disability and autism. Debate continues as to whether ADHD is a disorder with neurobiological basis or a social construct (Timimi 2004) and there is a resistance to the diagnosis of ADHD in some quarters, along with stigmatisation of those seeking a diagnosis (Young 2021).

ADHD is under-recognised in clinical settings (Ginsberg 2014). Under-recognition is particularly a problem in adults, those with an inattentive presentation, women and possibly in minority ethnic groups. In addition – as with other neurodevelopmental disorders – comorbidities are common, along with risk of diagnostic overshadowing.

This has resulted in calls for better training for professionals who encounter ADHD in their work. Long waiting lists and significant unmet patient need mean that existing provision must expand, and to do this more training opportunities are required. There are no current nationally agreed standards for clinicians working in the field of ADHD. The National Institute for Health and Care Excellence (NICE) states that professionals should undertake training but without detailing specifics (NICE 2018). It is likely that this training would usually supplement broader psychiatric training, for example that gained through higher (specialty) psychiatric training, although curricula requirements between subspecialties vary in this domain.

#### Training subspecialisation

NICE recommends that diagnosis of ADHD and autism spectrum disorder (ASD) be made by specialist teams (NICE 2012, 2018). The benefits of this are a depth of knowledge and experience, and rigour in diagnosis. However, specialist teams may lack training in frequently co-occurring conditions, for example it may be outside the remit and experience of an ASD diagnostic team to make ADHD diagnoses and there may sometimes even be problems of recognition. The question of how to ensure sufficient depth of knowledge and experience in one condition along with the necessary breadth to avoid missing co-occurring conditions is a real challenge for training and team configuration in healthcare settings.

**BOX 2** Examples of complex issues facing psychiatrists in relation to Capabilities 2 and 13 of the Core Capabilities

Framework for autism

- Distinguishing between pica and swallowing harmful objects in the context of self-harm
- Distinguishing avoidant and restrictive food intake disorder (ARFID) from anorexia nervosa
- Considering the differential diagnosis and management approach for post-traumatic stress disorder (PTSD), including complex PTSD, versus personality disorder versus emotion dysregulation in the context of sensory overload
- Recognising catatonia and distinguishing it from core autism features which can present in a similar way in autistic people
- Diagnosing co-occurring attention-deficit hyperactivity disorder (ADHD)
- Distinguishing between obsessive—compulsive disorder, anankastic personality traits and features of autism
- Avoiding diagnostic overshadowing in situations of emotion dysregulation where multiple factors may contribute
- Considering depression versus emerging constructs such as autistic burnout
- Assessing self-harm bearing in mind it is a complex phenomenon, common in autistic and neurotypical people alike, where there may be a multiplicity of precipitating and maintaining factors
- Understanding subtleties in behavioural presentations and possible explanations, including stimming, communicating distress and self-soothing
- Complex presentations with multiple co-occurring neurodevelopmental disorders (intellectual disability, ASD, ADHD)
- Autistic people with forensic needs (Health Education England 2019b)

Diagnostic overshadowing is a well-recognised problem, and it may occur where a specialist team makes a robust diagnosis of one condition and all aspects of the clinical presentation are attributed to this

It can be argued that splitting training according to diagnosis when working with the general population has one important advantage – avoidance of the conflation of autism and intellectual disability. This conflation is a matter of concern to many autistic people, who would be keen to point out research suggesting that around 70% of autistic people do not have intellectual disability (Rydzewska 2018). In contrast, higher specialty training in the psychiatry of learning disability covers a wide spectrum of neurodevelopmental disorders, including autism and

ADHD, in recognition of the fact that intellectual disability is often accompanied by myriad comorbid disorders that may need identifying and treating. Many intellectual disability psychiatrists use their skill set to assess and manage autism and ADHD in the general (non-intellectual disability) population, to support service provision for this currently underserved population.

# **UK training pathways for psychiatrists**

## Early medical training

Training in neurodevelopmental disorders for medical students educated in the UK is generally very limited; the General Medical Council's 'outcomes for graduates' require newly qualified doctors to 'be able to recognise and identify factors that suggest patient vulnerability and take action in response', which includes being able to 'assess the needs of, and support required for, people with a learning disability' (GMC 2018: p. 12).

The UK Foundation Programme curriculum (UK Foundation Programme 2021), followed by nearly all doctors in training when they first enter clinical practice, explicitly emphasises the need for physical and mental health training in tandem. Although the 2-year foundation training programme mandates covering some core psychiatric conditions, the only mention of neurodevelopmental disorders relates to communication skills in the second 'Communicates effectively in more challenging situations, such as: [where] communication is more difficult, e.g. because of [ ... ] immaturity or learning disability, and uses an interpreter or other professional including IMCA [independent mental capacity advocate] or IMHA [independent mental health advocate as appropriate' (UK Foundation Programme 2021: p. 74). Each Foundation Programme placement lasts for 4 months and not all rotations include a psychiatric placement.

## Core psychiatric training

Core psychiatric training is a 3-year programme consisting of 6-month placements in a range of subspecialties. The RCPsych's curriculum for core training in psychiatry recommends that 6 months of that training is spent in a developmental psychiatry placement, namely child and adolescent psychiatry or psychiatry of learning disability (RCPsych 2022a: p. 2). However, this experience cannot be mandated because of deliverability problems. Despite this, it is hoped that making explicit reference to neurodevelopmental disorders in both the communication and clinical skills domains will ensure all trainees gain experience in neurodevelopmental disorders during core training (Box 3). The choice of the term neurodevelopmental

# **BOX 3** Core psychiatry curriculum: selected neurodevelopmental disorder-specific key capabilities

#### Communication

'Consistently demonstrate effective communication approaches with patients and relevant others, including those with neurodevelopmental disorders making reasonable adjustments and adaptations where appropriate, including the use of new technologies' (2.1: p. 7).

#### Clinical skills

'Demonstrate an appropriate understanding of learning and behavioural stages of human development through the lifespan including awareness of normative as well as variations in presentations, for example with neurodevelopmental conditions and across cultures' (2.2: p. 8).

'Receive a full psychiatric history from, perform a Mental State Examination (MSE) on, and assess capacity of, patients within a range of mental and neurodevelopmental disorders across the lifespan, in routine, urgent and emergency situations incorporating appropriate terminology' (2.2: p. 8).

(RCPsych 2022a)

disorders, which is used throughout this and all the RCPsych curricula, was a deliberate decision to ensure trainees have opportunity to gain a wide range of clinical experience in this domain not just, for example, seeing autism or ADHD; alongside this we need to be mindful that using a 'broad brush' term will be open to interpretation and is not a guarantee that trainees will be exposed to a range of disorders and presentations.

# Higher psychiatric training

Higher psychiatric training is generally a 3-year programme in one of six psychiatric subspecialties (general, old age, child and adolescent, forensic and learning disability psychiatry and medical psychotherapy), each with its own curriculum (RCPsych 2022b, 2022c, 2022d, 2022e, 2022f, 2022g). There is considerable variability between the higher psychiatric curricula regarding focus on neurodevelopmental disorders. The Silver Guide (RCPsych 2022h), the RCPsych's overarching guide to education and training, acknowledges the opportunity for trainees in certain higher subspecialties to spend up to 12 months of their training in another relevant subspecialty, giving opportunity to develop skills in assessment and management of neurodevelopmental disorders. However, in practice this does not commonly occur because of limitations in training placement availability and the demands of meeting the primary training curriculum.

The Silver Guide also encourages the use of 'professional development sessions' (formerly, special interest sessions) for the purpose of further developing a relevant clinical interest or addressing a learning need by gaining clinical experience at a specialist clinic, for example adult ADHD or adult ASD, but this relies on the trainee demonstrating that interest and learning opportunities being available.

For higher trainees who need to gain particular expertise in autism, undertaking training in standardised diagnostic tools is considered good practice. It is beyond the remit of the curriculum to recommend such specific training experiences; however, it is important to mention it here, not the least because such training carries significant financial outlay. In some cases, trainees may need to self-fund this training.

## Child and adolescent psychiatry

The RCPsych's 2022 child and adolescent psychiatry higher training curriculum (RCPsych 2022d) clearly articulates the need for knowledge, skills and expertise in neurodevelopmental disorders, including autism, ADHD and intellectual disability (Box 4). It also emphasises the need for necessary skills in managing the complex comorbidity between mental disorders and neurodevelopmental disorders, for example in a young person with an eating disorder and autism. The RCPsych's

BOX 4 Child and adolescent psychiatry higher training curriculum: selected neurode-velopmental disorder-specific key capabilities

# Communication

'Consistently demonstrate effective communication approaches with patients and relevant others, including those with neurodevelopmental disorders making reasonable adjustments and adaptations where appropriate, including the use of new technologies' (2.1: p. 6).

# Clinical skills

'Apply expert knowledge of learning and behavioural stages of human development across the age range of 0–18 years, including knowledge of normative as well as variations in presentations, for example with neurodevelopmental conditions, and across cultures and apply this knowledge to daily clinical practice' (2.2: p. 7).

'Receive a full psychiatric history from the patient and collateral history from a range of informants and perform a Mental State Examination (MSE) across the range of mental and neurodevelopmental as well as neuropsychiatric disorders in the 0–18 age group' (2.2: p. 7).

(RCPsych 2022d)

Neurodevelopmental Psychiatry Special Interest Group has been an active stakeholder in the current curricular revision.

# Learning disability

Higher training in this subspecialty has neurodevelopmental disorders as a key focus, with 'specialist skills in the assessment, formulation, diagnosis and management of [...] neurodevelopmental disorders [...] in people with Learning disabilities' being included in the curriculum purpose statement (RCPsych 2022f: p. 4).<sup>a</sup> Box 5 details the relevant capability statements. As mentioned above, the curriculum also highlights the transferability of the neurodevelopmental disorders capabilities to the wider psychiatric population.

## CAP-LD dual training

This is a 5-year training programme in child and adolescent psychiatry (CAP) and learning (intellectual) disability (RCPsych 2023). Trainees will gain the required experience in neurodevelopmental disorders from both curricula, plus additional specialist skills relevant to children and adolescents with intellectual disability and comorbid neurodevelopmental disorders (autism and ADHD).

**BOX 5** Learning disability<sup>a</sup> higher training curriculum: selected neurodevelopmental disorder-specific key capabilities

# Communication

'Consistently communicate effectively with patients across the spectrum of cognitive ability, including those with neurodevelopmental disorders and relevant others, utilising a range of methods and adapting your style of communication to the patient's needs, making reasonable adjustments as appropriate' (2.1: p. 8).

#### Clinical skills

'Demonstrate an appropriate understanding of learning and behavioural stages of human development through the lifespan including awareness of normative as well as variations in presentations, for example with neurodevelopmental conditions and across cultures' (2.2: p. 9).

'Demonstrate proficiency in the assessment and diagnosis of mental and neurodevelopmental disorders in patients with learning disability across the spectrum of cognitive ability using classification systems as appropriate' (2.2: p. 10).

a. Confirmation of the name change from learning disability to intellectual disability on the Specialist Certificate of Completion of Training (CCT) is still awaiting legislative approval by the UK Government.

(RCPsych 2022f)

a. Confirmation of the name change from learning disability to intellectual disability on the Specialist Certificate of Completion of Training (CCT) is still awaiting legislative approval by the UK Government. Therefore any references in this article to this training curriculum use the term learning disability.

BOX 6 General psychiatry, old age psychiatry, forensic psychiatry and medical psychotherapy higher training curricula: selected shared neurodevelopmental disorder-specific key capabilities

#### Communication

'Consistently demonstrate effective communication approaches with patients and relevant others, including those with neurodevelopmental disorders making reasonable adjustments and adaptations where appropriate, including the use of new technologies' (2.1).

#### Clinical skills

'Demonstrate an appropriate understanding of learning and behavioural stages of human development through the lifespan including awareness of normative as well as variations in presentations, for example with neurodevelopmental conditions and across cultures' (2.2).

'Demonstrate proficiency in receiving a full psychiatric history and performing a Mental State Examination (MSE) for patients presenting from the whole spectrum of mental and neurodevelopmental disorders in adults; in routine, urgent and emergency situations and in various different settings (community, inpatient and acute hospitals)' (2.2).<sup>a</sup>

a. This capability is only in the general psychiatry curriculum.

(RCPsych 2022b, 2022c, 2022e, 2022g)

# Other higher training curricula

The remaining four higher psychiatric training curricula share capability statements in relation to neurodevelopmental disorders (Box 6). These statements are also shared with the core psychiatry curriculum (Box 3), therefore clarification is needed as to how these capabilities are to be approached differently from core training.

# Post-higher training and non-training grades in psychiatry

In writing this article we recognise that the majority of psychiatrists in the UK are not currently in training. However, given that ongoing CPD (continuing professional development) activity is important for all, we argue that neurodevelopmental disorders should form part of this. In addition, given the limitations in curricula content on neurodevelopmental disorders for most of the psychiatry training pathways described above, we would propose that there is a need for additional bespoke training in neurodevelopmental disorders for all psychiatrists.

The RCPsych currently has a number of good resources on neurodevelopmental disorders accessible to clinicians through its website (Box 7), but these do not equate to a comprehensive 'Tier 3'

# **BOX 7** RCPsych learning resources for neurodevelopmental disorders

# eLearning Hub (elearninghub.rcpsych.ac.uk)

- Neurodevelopmental disorders and offending behaviour webinar
- The ICD-11 classification of mental, behavioural or neurodevelopmental disorders webinar
- ADHD in under-18s learning module
- Adult attention-deficit hyperactivity disorder (ADHD) learning module
- Adult ADHD and psychosis podcast
- Complementary medicines for autism spectrum disorder (ASD) and ADHD learning module
- · Neurobiology of ADHD podcast
- Treatment of ADHD in prison inmates podcast
- People with intellectual and developmental disability in police custody and courts webinar
- Prescribing anti-epileptic drugs for epilepsy and intellectual disability learning module
- Sensory impairment and intellectual disability learning module

# Neurodevelopmental Psychiatry Special Interest Group (NDPSIG) (www.rcpsych.ac.uk/members/special-interest-groups/neurodevelopmental-psychiatry)

Provides a forum for psychiatrists interested in neurodevelopmental disorder, and maintains pages on the RCPsych's website and an internet discussion forum. The RCPsych's Autism Champion leads the Autism Programme, with representation across the RCPsych and the UK. NDPSIG has been instrumental in developing key RCPsych resources, including:

The Psychiatric Management of Autism in Adults (CR228) (RCPsych 2020)

Interview Guide for the Diagnostic Assessment of Able Adults with Autism Spectrum Disorder (ASD) (Berney 2017)

Diagnostic Interview Resource for Adults with Autism Spectrum Disorder (ASD) (available to RCPsych members from www.rcpsych.ac.uk/members/special-interestgroups/neurodevelopmental-psychiatry/resources)

The NDPSIG has a link with the UK Adult ADHD Network (UKAAN), which provides training courses covering diagnosis, assessment and treatment (www.ukaan.org/training.htm)

# Faculty of Intellectual Disability

The Faculty has collated a list of learning resources aimed primarily at medical students and psychiatry trainees, although they are also of value to other practitioners in the field (www.rcpsych.ac.uk/members/your-faculties/intellectual-disability-psychiatry/training-resources).

Topics include:

What is an intellectual disability? Communication skills Mental health problems Challenging behaviour guidelines

Positive behaviour support

Psychotropic drug prescribing

Reasonable adjustments

Autism and ADHD in intellectual disability

Health inequalities

Genetics

Forensic intellectual disability

Court of Protection

Intellectual disability for child and adolescent mental health services (CAMHS ID)

Epilepsy

Mental Capacity Act

Dementia and intellectual disability

The Faculty has produced several College Reports that provide guidance on key clinical topics, such as:

Attention Deficit Hyperactivity Disorder (ADHD) in Adults with Intellectual Disability (CR230) (RCPsych 2021)

level of provision as outlined by Core Capabilities Framework for Supporting Autistic People (Health Education England 2019b) mentioned earlier.

# NICE guidance on MDT roles in assessment and management of neurodevelopmental disorders

The importance of training and of the role of specialist multidisciplinary teams (MDTs) is recognised in all NICE guidance pertaining to neurodevelopmental disorders. For instance, NICE guidelines on recognition and assessment of autism in under-19s (NICE 2011) and adults (NICE 2012) place a huge emphasis on the core MDT skills and competencies in assessment, effective communication and identification of coexisting health and social care needs. They highlight the need for further research on training the wider workforce in early assessment and identification of neurodevelopmental disorders.

NICE guidance for ADHD recommends that all National Health Service (NHS) trusts develop age-appropriate training programmes for the diagnosis and management of ADHD for mental health, paediatric, social care, education, forensic and primary care providers and other professionals who have contact with people with ADHD. There is specific guidance for child and adult psychiatrists, paediatricians and other child and adult mental health professionals (including those working in forensic services) to be trained in diagnosis and management of ADHD (NICE 2018).

The NICE guidance for learning disabilities has a specific section on staff training, supervision and

support. It recommends that all staff working with people with a learning (intellectual) disability and challenging behaviour are trained to deliver proactive strategies to reduce the risk of such behaviour (NICE 2015).

# Training pathways for allied health professionals

Allied health professionals are an integral part of MDTs working with patients with neurodevelopmental disorders; there is a considerable degree of heterogeneity in training curricula at present, often dependent on the institution offering the course. A brief summary is provided here, to support psychiatrists in their understanding of their MDT colleagues' roles in the assessment and management of neurodevelopmental disorders.

# Occupational therapy

Undergraduate occupational therapy training courses are broad-based, supporting people with a range of conditions, including mental health issues and 'injury or disability' (Royal College of Occupational Therapists 2023), with neurodevelopmental disorderspecific content forming only a small percentage of the total coverage. Many specialist neurodevelopmental occupational therapists complete specialist training courses as postgraduates, for example in sensory integration or relevant psychotherapeutic modalities, and gain practical experience in educational and clinical settings.

#### Nursing

It has been highlighted that there are gaps in mental health nursing training regarding neurodevelopmental disorders (Sweetmore 2022), although communication skills commonly feature as a core component. Learning disability nursing training provides a grounding in key neurodevelopmental disorders in the context of intellectual disability, but anecdotally such training is not adequately focused on the full range of mental health comorbidities presenting in individuals with neurodevelopmental disorders and additional mental health needs.

# **Psychology**

Most entry-level undergraduate course programmes in psychology in the UK typically include training in developmental psychology, usually in the final year of the course. There are also specific courses titled BSc (Hons) Psychology with Developmental Disorder. Further postgraduate study at Doctoral level is required to work as a clinical psychologist, with some – but often limited – coverage of the

range of neurodevelopmental disorders listed in their curricula.

## Speech and language therapy

Royal College of Speech and Language Therapy curriculum guidance (RCSLT 2021) includes identifying aetiological and prognostic factors and presenting features of ADHD, ASD and intellectual disability with co-occurring speech and language difficulties or a comorbid speech and language disorder as a core capability.

# Postgraduate courses in neurodevelopmental disorders

There are also postgraduate courses offered by certain universities (e.g. an MSc in Clinical Neurodevelopmental Sciences), which attract both medical professionals and other colleagues, including psychologists and nurses. These courses include a strong research component, with a dissertation expected on a theme relevant to neurodevelopmental disorders.

# MDT training and the contribution of the psychiatrist

All health professionals who work with people with neurodevelopmental disorders require training up to Tier 2 level so that they recognise and appropriately support patients with neurodevelopmental disorders, including making reasonable adjustments. In addition, training must cover co-occurring conditions, including mental health conditions. Psychiatrists can contribute to this training, as well as providing clinical advice and support 'on the ground' to other professionals, as required.

MDT members working in specialist services (e.g. intellectual disability teams, specialist autism teams and other teams where neurodevelopmental disorder presentations are likely to be common or complex, such as eating disorders teams) will require Tier 3 training. At this level of complexity, knowledge about diagnostic and management subtleties is essential. Psychiatrists can contribute specific skills to such an MDT approach, for example through assessment and management of comorbidities and consideration of diagnostic overshadowing. There is an acknowledged gap in specific training to allow these specialists to hone their skills. However, participation in a community of practice, for example the Neurodevelopmental Psychiatry Special Interest Group at the RCPsych, is increasing and the development of bespoke Tier 3 training by the RCPsych is underway.

Psychiatrists can also benefit from training provided by MDT colleagues with greater profession-specific expertise in certain domains of

neurodevelopmental disorders, in particular sensory sensitivities (occupational therapy) and communication needs (speech and language therapy).

# **International training options**

There is little to no demarcation between intellectual disability and autism/ADHD services in low- and middle-income countries, with services essentially intertwined. Subspecialisation in neurodevelopmental disorders has therefore been raised as an issue for psychiatrists in such regions. Many settings view this as a luxury rather than a necessity, considering the very significant paucity of psychiatrists as well as other mental health professionals in low- and middle-income countries (Robertson 2010). Shortage of trained professionals and lack of research/training centres are major barriers to training doctors and other professionals in neurodevelopmental disorders, particularly in resource-scarce settings; however, there are some successful programmes, including several under the auspices of the World Health Organization (WHO), that act as exemplars in this regard (Mian 2015).

Several postgraduate training schemes, including fellowship programmes in child and adolescent psychiatry with a particular focus on neurodevelopmental disorders, have been rolled out in a number of countries in the recent past, but lack of standards and lack of standardisation pertaining to training have been highlighted as a common concern. Focus on neurodevelopmental disorders in adults is still lacking from a training perspective in most low- and middle-income countries (Kommu 2020).

Some generic international training programmes for neurodevelopmental disorders exist to promote collaborative and global learning. These courses usually involve an individualised curriculum tailored to each scholar's interests to maximise their existing skills and develop the core competencies that are for crucial for neurodevelopmental intervention specialists, regardless of their existing specialisation or areas of interest. A WHO international conference on autism and neurodevelopmental disorders recommended culturally appropriate capacity building on the subject among many groups, including healthcare professionals, teachers and parents (WHO 2017).

# **Future direction**

Recent years have seen an increase in awareness and understanding of neurodevelopmental disorders – in particular, autism and ADHD – and the associated complexities both in the UK and further afield. The development of specialist neurodevelopmental disorders teams in the UK has been a major

change in service provision and one to be welcomed; however, these teams cannot be - and should not be expected to be – the sole provision for psychiatric care for individuals with neurodevelopmental disorders. We are clear that consideration of possible neurodevelopmental disorders, assessing/signposting for assessment, and management of associated psychiatric needs should be seen as 'core business' for all psychiatrists. The new RCPsych curricula support this, with neurodevelopmental disorders being threaded through the clinical domain of each one. Ensuring that training becomes embedded in routine clinical practice over time may prove an issue, but provision of appropriately tailored CPD can help support ongoing learning and development in this regard. Psychiatrists are uniquely well-placed to understand complexity and thus to support MDTs not only in assessment, but also through supervision of MDT colleagues and junior psychiatrists in training. These activities in themselves will further support ongoing development of their own skill set.

Psychiatrists working in subspecialties where neurodevelopmental disorders are 'common currency' (primarily intellectual disability and child and adolescent psychiatry) as well as those working in specialist neurodevelopmental disorders teams dealing with the general population, require training at a more complex and tailored level. The new RCPsych curricula for intellectual disability and child and adolescent psychiatry support this, as will Tier 3 training when available. Psychiatrists with this level of knowledge, skills and training are a highly valuable resource for clinical practice and supervision, as well as providing teaching and training to a wide range of professionals across different sectors. These roles need to be recognised and supported.

It is likely that understanding of neurodevelopmental disorders will continue to evolve, and along with it training will need to change and develop. The new RCPsych curricula have tried to recognise this through using broad capability statements that aim to encompass the themes of training without spelling out detail that may quickly go out of date. The potential pitfalls of this approach clearly include such statements being open to interpretation and a variety of levels of engagement with the content; the challenge for formal psychiatry training is therefore to 'put the flesh on the bones' and ensure that the training undertaken is rigorous enough to create a community of capable practitioners, while also supporting those who wish to develop a more in-depth knowledge and skill set to do so.

The need to develop robust training and accreditation in neurodevelopmental disorders for psychiatrists is well recognised. In the UK, the RCPsych is

supporting this through development of an accredited Tier 3 training programme for psychiatrists. It is envisaged that this will translate to high standards of service delivery, assessment and management of neurodevelopmental disorders. Further work is needed to develop robust training packages for psychiatrists in the international sphere.

MCQ answers 1 c 2 d 3 e 4 b 5 e

# **Acknowledgements**

We thank Professor Asit Biswas for his guidance with this article and Dr John Russell, RCPsych Associate Dean for Curricula, for his leadership of the recent RCPsych Curricula revision.

#### **Author contributions**

All authors contributed to the first draft of this article. M.B., A.S. and S.G. carried out the revision.

## **Funding**

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

# **Declaration of interest**

A.S. and S.G. are members of the *BJPsych Advances* editorial board and did not take part in the review or decision-making process of this article.

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#### MCQs

Select the single best option for each question stem

- 1 The Core Capabilities Framework for Supporting Autistic People does not include the domain of:
- a understanding autism
- b personalised support
- **c** understanding the overlap between autism and other neurodevelopmental disorders
- d risk, legislation and safeguarding
- **e** leadership and management, education and research.
- 2 The Oliver McGowan Mandatory Training Programme in Learning Disability and Autism is aligned with the capabilities in:
- a Tier 1
- b Tier 2
- c Tier 3
- d a and b
- e a, b and c.

- 3 NICE guidance on recognition and assessment of autism in under-19s recommends that all members of the MDT have all of the following core skills and competencies except:
- a carrying out an assessment for ASD
- b effective communication and advice-giving
- c liaison with other professionals
- d identify coexisting health and social care needs of these young people
- **e** carrying out research studies pertaining to neurodevelopmental disorders.
- 4 As regards training in neurodevelopmental disorders in England:
- a all health professionals require Tier 3 training
- b all psychiatrists require Tier 3 training
- undergraduate training in neurodevelopmental disorders for allied health professionals is welldeveloped
- d Tier 1 and 2 training does not include mental health conditions
- NICE guidance for learning disability does not recommend training on proactive strategies to reduce the risk of behaviour that challenges.

- 5 As regards neurodevelopmental disorders training for psychiatrists:
- a capabilities in neurodevelopmental disorders are not specified in the 2022 RCPsych core psychiatry curriculum
- b the RCPsych curriculum hub provides CPD learning opportunities in neurodevelopmental disorders
- c Tier 3 training for psychiatrists is now widely available
- d psychiatrists do not contribute to Tier 1 and 2 training
- e ongoing CPD activity in neurodevelopmental disorders is indicated for consultant psychiatrists and non-training grade doctors working in general psychiatric services.