

What is Dyspraxia?

- ❖ Dyspraxia is a prevalent childhood disability that affects 5-6% of school aged children.
- ❖ Dyspraxia is a Learning Difficulty not a Learning Disability.
- ❖ Due to terminology used by health and educational professionals, in 1994 Dyspraxia became known under the umbrella term as Developmental Co-ordination Disorder (DCD) due to its complexity and each child's uniqueness.
- ❖ DCD is a chronic neurological disorder that impairs a child's gross and fine motor skills.
- ❖ During 2022-23, 55 children attending educational settings in Wales, were recorded as having Dyspraxia.

(NHS, 2023., Welsh Government, 2023., Mencap, 2023)

Identifying DCD

Early signs of DCD may be observed by parents:-

- ❖ When age-appropriate developmental milestones such as rolling over, sitting, crawling, and walking are delayed.
- ❖ Inability to perform task which require good coordination, this can include using utensils for feeding or when trying to stack blocks
- ❖ When the ability to walk has been achieved, spatial and body awareness issues may arise, this can result in the child demonstrating awkward and clumsy behaviour

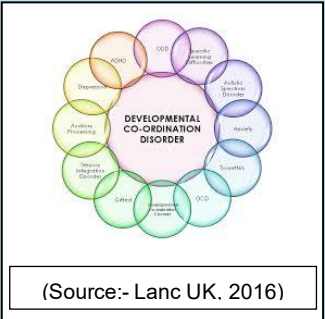
(NHS, 2023., Harris *et al.*, 2015.p. 659-665)

Signs Observed by Practitioners:-

Awareness that the child demonstrates whole body motor coordination difficulties.

- ❖ Ineffective combinations of movement sequences and the inability to defining the left- and right-hand side of their bodies.
- ❖ Difficulties in climbing, jumping, and running
- ❖ Difficulties in concentration
- ❖ Poor organisation skills
- ❖ Taking longer to pick up new skills
- ❖ Tasks maybe rushed due to reduce balance and control.

(Tran *et al.*, 2022., Bremner *et al.*, 2012)



Diagnosis of DCD

- ❖ Developmental and Behavioural Observations
- ❖ Developmental screening that screen across all streams of development
- ❖ The Movement Assessment Battery for Children-2 (MABC-2)
- ❖ Diagnostic and Statistical Manual of Mental Disorders ([DSM-5](#))
- ❖ Diagnosis criteria for developmental motor coordination disorder (ICD-11)
- ❖ Evaluation findings of developmental tests.
- ❖ Clinical psychological or neuropsychological evaluation and psychological testing.
- ❖ Clinical history and physical examination.
- ❖ Professional diagnosis.

(BDA, 2024., Dyspraxia UK, 2023)

How to Recognise and Support Children with Dyspraxia

Challenges, Issues and Benefits of early diagnosis

Challenges and Issues of a delayed diagnosis:-

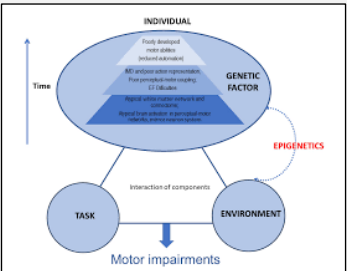
- ❖ Limits opportunities to access targeted interventions
- ❖ Regressive development
- ❖ Regressive behaviour
- ❖ Secondary consequences such as Psychological, Cognitive and Speech Difficulties
- ❖ Overlapping specific learning difficulties, such as, ADHD, ASD, and Dyslexia
- ❖ Short term memory problems
- ❖ Parents pushing for pushing for Diagnosis – Money, Justifying a child's behaviour, Attention
- ❖ Masking symptoms
- ❖ Attitudinal Attitudes
- ❖ Stigma of other's

(Broomhead, 2019.p, 127., Armstrong *et al.*, 2017, p. 12., Holland *et al.*, 2018.p.329., Boyes Turner, 2017)

Benefits of early diagnosis:-

- ❖ Increase factors that positively influence a child's wellbeing.
- ❖ Decrease negative risk factors impacting a child's life.
- ❖ Identifying the child or family's needs.
- ❖ Identifying educational support.
- ❖ Inclusion.
- ❖ Each child will have a unique combination of difficulties.
- ❖ 'Whole Child' focus.
- ❖ Neurodiversity

(Welsh Government, 2021., NHS, 2023, Rudy, 2024.,)



Barriers and the impact on the child

- ❖ Lack of consistency of the diagnostic process
- ❖ Causing frustration and stress for families seeking help for their child.
- ❖ Confusing messaging and lack of support.
- ❖ Lack of knowledge about DCD amongst health and care providers.
- ❖ Inconsistent and inefficient pathways to access a diagnosis.
- ❖ Long waiting times between referrals.
- ❖ Long wait times to access diagnostic services.
- ❖ Environmental factors, such as class sizes, staff ratios and trained staff

(Warwick University, 2024., O'Dea *et al.*, 2021a ., Izadi-Najafabadi *et al.*, 2019))

Multi - Agency Approach

What is it?

- Integral working with a collaboration of professionals within a single team.
- A problem solving approach
- Enabling and enhancing inclusive education.

Who is involved?

- Occupational Health
- Physiotherapists
- Psychologists
- Paediatricians
- Education setting
- Speech and Language therapists

Why?

- Tailored to the individual child and family's needs
- Child centred approach
- Develop Overlapping Strategies and Perspectives
- Coordinated support

(Farrell, 2022., Movement Matters, 2023)



(Source:- Flintshire County Council , 2019)

Challenges and Issues

Disadvantages to working with multiple agencies:-

- ❖ Ineffective communication between agencies
- ❖ Information not being shared
- ❖ Mixed messages
- ❖ Lack of consistencies in the support structure
- ❖ Increases confusion complexities when dealing with agency approaches and Best Practice.
- ❖ Complexities in dealing with cultural differences through communication
- ❖ Increases the time required to collaborate with the multiple agencies,
- ❖ Coordinating numerous professionals

(Farrell, 2022)

Benefits

Benefits of working with multiple agencies:-

- ❖ Promotes sharing of expertise, professional knowledge, and resources for best practices.
- ❖ Build a cohesive approach through unifying multiple agency teams
- ❖ Provides continuity and joint planning
- ❖ Enhances and improves outcomes.
- ❖ To provide the best support for the child

(Meachon, 2023)



(Carmarthenshire Family Information Service, 2024)

Reference List For Poster

Armstrong, M. *et al.* (2017) 'Interventions utilising contact with people with disabilities to improve children's attitudes towards disability: A systematic review and meta analysis', *Disability and Health Journal*, 10(1), pp. 11–22. doi:10.1016/j.dhjo.2016.10.003.

BDA (2024) *Dyspraxia (DCD)*, *British Dyslexia Association*. Available at: <https://www.bdadyslexia.org.uk/dyslexia/neurodiversity-and-co-occurring-differences/dyspraxia> (Accessed: 03 May 2024).

Boyes Turner (2017) *Parents to blame for misdiagnosis of special educational needs?* Available at:

<https://www.senexpertsolicitors.co.uk/site/news/parents-to-blame-for-misdiagnosis-of-special-educational-needs> (Accessed: 29 April 2024).

Bremner, A.J., Lewkowicz, D.J. and Spence, C. (2012) *Multisensory development*. Oxford: Oxford University Press.

Broomhead, K.E. (2019) 'The influence of the nature of children's disabilities on societal reactions experienced by their parents', *Journal of Research in Special Educational Needs*, 19(2), pp. 126–134.

doi:10.1111/1471-3802.12435.

Carmarthenshire Family Information Service (2024) *Right help at the right time*. Available at: <https://fis.carmarthenshire.gov.wales/local-services/right-help-right-time/> (Accessed: 03 May 2024). [Image]

Dyspraxia UK (2023) *Dyspraxia UK*. Available at: <https://dyspraxiauk.com/> (Accessed: 26 April 2024).

Farrell, M. (2021) *Supporting disorders of learning and co-ordination*, pp. 69–90. doi:10.4324/9781003177975.

Harris, S.R., Mickelson, E.C.R. and Zwicker, J.G. (2015a) 'Diagnosis and management of developmental coordination disorder', *Canadian Medical Association Journal*, 187(9), pp. 659–665.

doi:10.1503/cmaj.140994.

Holland, J. and Pell, G. (2018) 'Children with SEND and the emotional impact on parents', *British Journal of Special Education*, 45(4), pp. 392–411.

doi:10.1111/1467-8578.12240.

Izadi-Najafabadi, S. *et al.* (2019) 'Participation of children with Developmental Coordination Disorder', *Research in Developmental Disabilities*, 84, pp. 75–84. doi:10.1016/j.ridd.2018.05.011.

Lanc UK (2016) *Developmental Co-ordination Disorder*. Available at: <https://www.lanc.org.uk/related-conditions/developmental-co-ordination-disorder-adhd/> (Accessed: 03 May 2024). [Image]

Meachon, E.J. (2023) 'Perspective: Acknowledging complexity to advance the understanding of Developmental Coordination Disorder', *Frontiers in Human Neuroscience*, 16. doi:10.3389/fnhum.2022.1082209.

Mencap (2023) *Learning difficulties*. Available at: <https://www.mencap.org.uk/learning-disability-explained/learning-difficulties> (Accessed: 03 May 2024).

Movement Matters (2023) *Movement Matters*. Available at: <https://movementmattersuk.org/> (Accessed: 18 April 2024).

NHS (2023) *Developmental Co-ordination Disorder (dyspraxia) in children (DCD)*, NHS choices. Available at: <https://www.nhs.uk/conditions/developmental-coordination-disorder-dyspraxia/>

Accessed: 12 April 2024).

O'Dea, Á. *et al.* (2021) 'Children and young people's experiences of living with developmental Coordination Disorder/Dyspraxia: A systematic review and meta ethnography of qualitative research', *PLOS ONE*, 16(3). doi:10.1371/journal.pone.0245738.

Rudy, L.J. (2024) *Are you Neurodivergent?* Verywell Health. Available at: <https://www.verywellhealth.com/neurodivergent-5216749> (Accessed: 03 May 2024).

Tran, H.-T. *et al.* (2022) *Sensory processing impairments in children with developmental coordination disorder*, *Children (Basel, Switzerland)*. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9600147/>

(Accessed: 18 April 2024).

Warwick University (2024) *Dyspraxia*. Available at: https://warwick.ac.uk/fac/cross_fac/academy/activities/learningcircles/neurodiversity/toolkit/thebasics/dyspraxia/ (Accessed: 03 May 2024).

Welsh Government (2021) *The Additional Learning Needs Code for Wales 2021*. Available at:

<https://www.gov.wales/sites/default/files/publications/2022-06/220622-the-additional-learning-needs-code-for-wales-2021.pdf> (Accessed: 18 April 2024).

Welsh Government (2023) *Reports of Additional Learning or Special Educational Needs in Primary, Middle and Secondary schools by sector, Welsh/English Medium, and type of need*. Available at:

<https://statswales.gov.wales/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census/Special-Educational-Needs/senreports-by-sector-welshenglishmedium-sentype> (Accessed: 18 April 2024).

You, H. *et al.* (2023) 'Advances in genetics and epigenetics of developmental coordination disorder in children', *Brain Sciences*, 13(6), p. 940. doi:10.3390/brainsci13060940. [Image]

