

Addressing the needs of children with rare diseases in education in Northern Ireland

Dr Stephanie Duguez (School of Medicine, Ulster University)

Sandra Campbell (Northern Ireland Rare Disease Partnership)

Contents

- Statistics / overview : Impact of rare diseases for children in education in Northern Ireland
- Literature Reviews
- Parent testimonies endorsements, challenges and recommendations.
- Addressing needs of teaching / support staff
- The way forward.

Key numbers

Definition: A rare disease affects no more than 1 person in 2000

Known disorders: 6,000-8,000 worldwide

Europe: 30 million individuals

UK: Over 3.7 million individuals

Northern Ireland: Over 110,000 individuals

50% under age 19

70% of rare diseases start in childhood

Only 5% of conditions have a treatment

On average, 5 years to diagnosis

Impact for children



Delayed diagnosis

Multisystemic disorders

Comorbidities

Developmental delay

Physical disabilities

Emotional and social development

Cognitive impact – multifactorial

Medical interventions and hospitalisation

Frequent school absences – sometimes prolonged

Family impact

Impact for learning



Sleep problems / fatigue

Concentration difficulties

Distractibility

Listening skills

Social skills

Motor skills affected

gross and fine motor delayphysical agility, balance,and coordination

Digestive issues

Continence issues

Discomfort

Sensory challenges

Low self-esteem and confidence

Lower expectations and achievements at key points

Impact for learning environments







Facilitating reasonable adjustments in physical environment

Understanding needs and relevant adjustments (whole staff)

Need for condition specific training

Links to relevant organisations where available (e.g. Muscular Dystrophy, Spina Bifida / Hydrocephalus)

Access to rare disease Toolkits

Critical care response (e.g Shunt blockage)

Literature Reviews - common themes



Need for rare disease information and training for improved outcomes for children.

Lack of knowledge to enable school personnel to provide appropriate learning environments and make curricular adjustments.

Children with rare diseases are educationally at risk of failing to achieve expected standards.

creating optimal educational settings for children with rare diseases – a working method

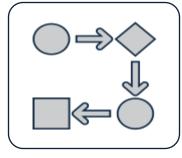
AnnCatrin Röjvika , Gunilla Jaegera , Erland Hjelmquistb and Kerstin W. Falkmanb



Children with rare diseases often display special education needs and require support and adapted pedagogical methods to participate and achieve academic goals.



The results show that rare diseases often have educational consequences and that a **holistic educational method**, applicable to most rare diseases, is needed, but **lacking**.



To contribute to a high-quality inclusive education teachers must understand how the origin of needs, including medical facts, their consequences and appropriate adjustments are closely linked.

tandfonline.com/doi/full/10.1080/08856257.2023.2294237#abstract

Inclusion and equity in educational services for children with rare diseases: Challenges and opportunities

Sebastià Vergera, Francisca Negrea, Maria Rosa Rossellóa, Berta Paz-Louridoa A given rare disease affects a minority of school-aged children, but the provision of **appropriate education** and care is a complex process influenced by:



- > the health condition of the individual child,
- the level of empowerment of families,
- > the availability of resources
- the commitment of the school and health care providers.



The delay or lack of a clear diagnosis is among the challenges to obtaining the adaptations required.



This highlights **the need for a strategic plan** to address the children's, families' and teaching staff's needs as well as regulate and institutionalize practices in the school.

https://doi.org/10.1016/j.childyouth.2020.105518

Rare Diseases in the Educational Field: Knowledge and Perceptions of Spanish Teachers

Ramón García-Perales , Ascensión Palomares-Ruiz , Lydia Ordóñez-García and Eduardo García-Toledano



By completing the questionnaire, the teachers were more aware that their **knowledge and training was insufficient** for providing a proper educational response to the potential and characteristics of these students.





Expanding training processes will be essential in overcoming this pattern. Currently, updating knowledge through continual training has become indispensable.



Education systems must strive to overcome the discrimination in educational processes.



It is clear from this study that there is still a long way to go in providing a proper educational response to these students with rare diseases.

We should be asking ourselves whether schools are doing all they can to offer quality, inclusive education to these students

pmc.ncbi.nlm.nih.gov/articles/PMC9140519/

aVR Participants included families of patients affected by various medical conditions: **Testimonies** • 22q 11 deletion (DiGeorge Syndrome) PKU (Phenylketonuria) Ehlers-Danlos Syndrome Chiari Malformation / Hydrocephalus/ Spina 111 Bifida (Complex) • EPP (Erythropoietic protoporphria) Vacterl Syndrome Foetal Valporate Syndrome (Shared with consent from participants) II

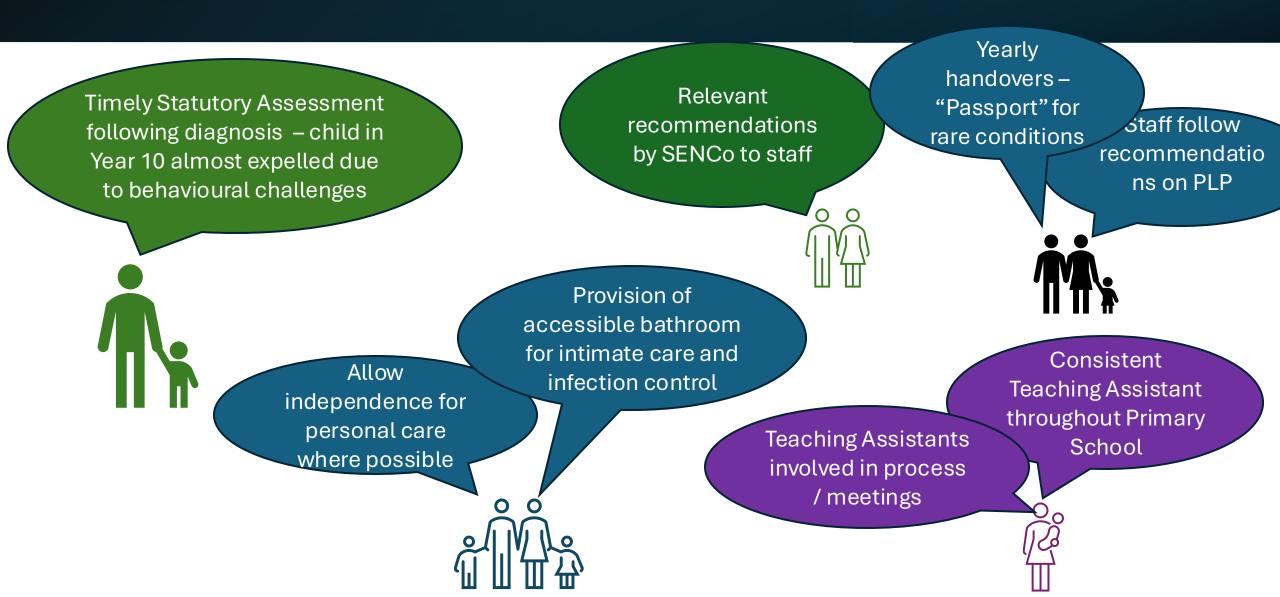
Questionnaire



Your Child's condition/s:_	
Age:	

- **1.** Can you describe an example/s of good practice with regards to your child's needs in school setting? What made the difference?
- **2.** Can you describe an example/s of poor practice in the school setting and explain what happened and any consequences from this?
- **3.** Please add any further comments/advice in relation to training needs for school staff supporting a child with the same condition.
- 4. Further comments.

1. Can you describe an example/s of good practice with regards to your child's needs in school setting? What made the difference?



1. Can you describe an example/s of good practice with regards to your child's needs in school setting? What made the difference?

Exceptional Teaching Arrangements in place for school absences

Communication directly between Parents/
Caregivers and TAs

EPP- allergy to sunlight –
Protective clothing managed
well by staff and child kept
away from windows. Pass
given to stay indoors on sunny
days



Bi-annual reviews and implementation of Statutory Assessment to ensure targets are addressed and achieved



Schools open to communication from Professionals and Parents





1. Can you describe an example/s of good practice with regards to your child's needs in school setting? What made the difference?

Medical / critical information shared (PKU, Access Voluntary Sector EPP) **Education Packages where** Whole staff awareness available / training for child with a rare condition Access specific training from Specialists (e.g. Shine) Good transition arrangements from Home - school Nursery – Primarynotebook Secondary

Poor communication from school

Refusal to address specific training opportunities

Poor transition of information from year to year

Exclusion from classroom activities

Discrimination/ exclusion due to rare diagnosis

Lack of training and willingness to learn about RD

Poor understanding of the child's needs specific to the condition (e.g 22q11 and mathematics)

Moderate LD school leavers – lack of qualifications in English and Mathematics – what next?

Information on transport

Transitions for children with LD – what is the best setting?

Emotional vulnerability / anxiety not always addressed

Guidance at transition stage on suitable school

Hidden disabilities – questioning the child

School absences due to illness – lessons not sent home as arranged . Friends supplied the lessons.

not a good match for this child"

"The whole process of secondary school was very stressful but perhaps the school was just

Dangerous practice with Medical conditions (child with EPP sent outside on hot day)

Child needs an advocate in school

Exclusion from PE outdoors at GCSE – no reasonable adjustments

No accommodation to rejoin class after school absences

Parents not being listened to

SENCos need to advise parents re ETA process

Training in medical conditions for TAs – need to have a standby in case TA absent.

Parents need to be involved in handovers each year

Delays in starting school due to facilities and training

Lack of communication between school and parents

Embarrassing questions re clothing (Problems with feet and non uniform footwear)

Help parents to understand SA process following diagnosis

GDPR and sharing health /sensitive information

"Staff training should be compulsory, and awareness sought on the conditions of the child in order for the child to continue his education without feeling that they are a burden. Any child coming through the school with a SEN statement should not have to face any ignorance on their conditions. I provided all information regarding my son's conditions also with pamphlets and internet links to the charities that provide the information they need to familiarise themselves with the conditions and how they affect the child.

Speak to the parents as they become the experts on this and take on board what they say. As each child is different, with my son's diagnosis, communication is the key and the school cannot label each child as the same."

Addressing needs of school staff





Rare condition does not require rare response

Be practical

Address individual needs as they arise

Learn about the condition

Learn about the child as a unique learner

Access literature / training where available

The child may need extra support with social / emotional development/ friendships due to absences from school

Addressing needs of school staff





Consider risks with Medical conditions and plan accordingly – welfare is paramount

Inform relevant staff on reasonable adjustments

Allow time to meet with parents each term – conditions and needs can change quickly

Please listen to concerns and advice

Recognise that many rare conditions are "hidden disabilities"

Parents are the experts in their child's condition

Examples of links for Education in rare conditions

- Education Shine
- Home The National Society for Phenylketonuria (NSPKU)
- Ehlers-Danlos syndromes NHS
- 22q11 2 deletion syndrome | About the Disease | GARD
- Duchenne UK
- Home British Porphyria Association

The way forward



RAISING AWARENESS ON EA WEBSITE



INFORMATION AVAILABLE FOR SCHOOL STAFF



FUTURE TRAINING
FOR LEARNING
SUPPORT
COORDINATORS
TO DISSEMINATE



SHARE LEARNING OPPORTUNITIES IN STAFF DEVELOPMENT DAYS

Template for an organic rare disease passport

- Specific to each child
- Living document: amended as the child's needs change throughout the school year

Child's condition

Year level: Semester: Meeting date:

Understanding the condition:

- _
- -
- _
- -
- Emergency:
- -

Needs specific to the condition:

- _
- _
- -

Impact of the condition on learning

- Motor skills

- Cognitive skills

- Fatigue/capacity to focus

- Social skills

Proposed learning strategy(ies)

- _
- _
- _

Child's condition

Year level: Semester: Meeting date:

Understanding the condition:

- _
- -
- -
- -
- Emergency:
- -

Needs specific to the condition:

- -
- -
- -

Other Impacts of the Condition on life at school

- Social skills

- Emotional development

- Digestive issues

Proposed strategy(ies)

- -
- -
- -