

Prevalence of physical disability in a cohort of adults with intellectual disability in Scotland

Dr Eshraqi Fikru
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Conclusion

Physical disability is common in adults with intellectual disability in Scotland. The prevalence of physical disability is higher in those with severe intellectual disability and in those with co-occurring mental health problems.

Results

1. What is the extent of multi-crenity in this cohort?

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Results

2. What is the prevalence of physical disability in this cohort?

Literature

Physical disability is common in adults with intellectual disability. The prevalence of physical disability is higher in those with severe intellectual disability and in those with co-occurring mental health problems.

Aim

To report the prevalence of physical disability in a cohort of adults with intellectual disability in Scotland.

Method

Using a cross-sectional design, we conducted a survey of 2000 adults with intellectual disability in Scotland. We used the International Classification of Diseases (ICD-10) to identify physical disability.

Method

Community health assessment
 - Multi-ethnic health assessment
 - Health assessment
 - Physical assessment
 - Psychological assessment
 - Assessment of intellectual disability
 - Assessment of mental health

Research Questions

1. What are the most prevalent physical health conditions?
2. What is the extent of multi-crenity by disability?

Results

Participants

- 2000 adults with intellectual disability
- 1020 males (51.0%) and 980 females (49.0%)
- Mean age: 32.2 years (range 21-83)
- SD: 10.8 years (IQR)
- 80% living in the community
- 124 (6.2%) with Down syndrome

| Level of ability (aged 17+) | n | % |
|-----------------------------|------|------|
| Severe | 1020 | 51.0 |
| Moderate | 980 | 49.0 |

~ Accommodated (n=100) for with family care (5% IQR 21-70) for independence (15-40) for with paid sector (32-70) for independence (40-70)

Thank you

Scottish
Learning Disabilities
Observatory

Prevalence of physical ill-health in a cohort of adults with intellectual disabilities in Scotland

Dr Deborah Kinnear

*Professor Jill Morrison, Associate Professor Linda Allan,
Professor Sally-Ann Cooper*



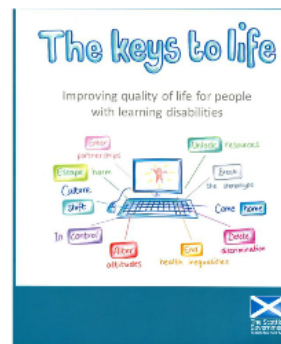
University
of Glasgow



The Scottish
Government
Riaghaltas na h-Alba

Background

- The Keys to life (Scottish Government, 2013) made a call for urgent action to address the health inequalities experienced by people with intellectual disabilities
- We need to have a better understanding of the health problems faced by people with intellectual disabilities and how we can improve their health and wellbeing



Literature

Common health problems experienced by people with intellectual disabilities are thought to include:

- Gastro-oesophageal reflux disorder
- Sensory impairments
- Osteoporosis
- Epilepsy
- Musculoskeletal problems
- Accidents
- Nutritional problems

However, most of these studies have methodological limitations (e.g. small scale, selected age groups/level of disability), few studies in the UK, no studies looking at certain physical health problems



Aim

To report the physical health conditions of adults with intellectual disabilities

Method

- Large prospective cohort study
- Adults (aged 16 and over) with intellectual disabilities living within the geographical area of Greater Glasgow Health Board, Scotland
- Of 1562 potential participants, 1023 adults consented to take part in the research (65.5%)



Method

Comprehensive health assessment:

- Review of primary health records
 - Structured history
 - Physical examination
 - Investigations (e.g. blood protocol)
 - Discussion/synthesis of all information (Diagnosis)
 - Coded and data entered into SPSS
-
- Physical health conditions were recorded using International Statistical Classification of Diseases (ICD -10)



Research Questions

1. What are the most prevalent physical health conditions?
2. What is the extent of multi-morbidity for this cohort?



Results

Participants

- 1023 adults with intellectual disabilities
- 562 males (54.9%) and 461 females (45.1%)
- Mean age 43.9 years (range 16–83)
- 96.4% of cohort White
- 95.7% single
- 186 (18.2%) with Down syndrome

- Levels of ability ranged from:

| Level | n | % |
|----------|------|------|
| Mild | 398 | 38.9 |
| Moderate | 248 | 24.2 |
| Severe | 193 | 18.9 |
| Profound | 184 | 18 |
| Total | 1023 | 100 |

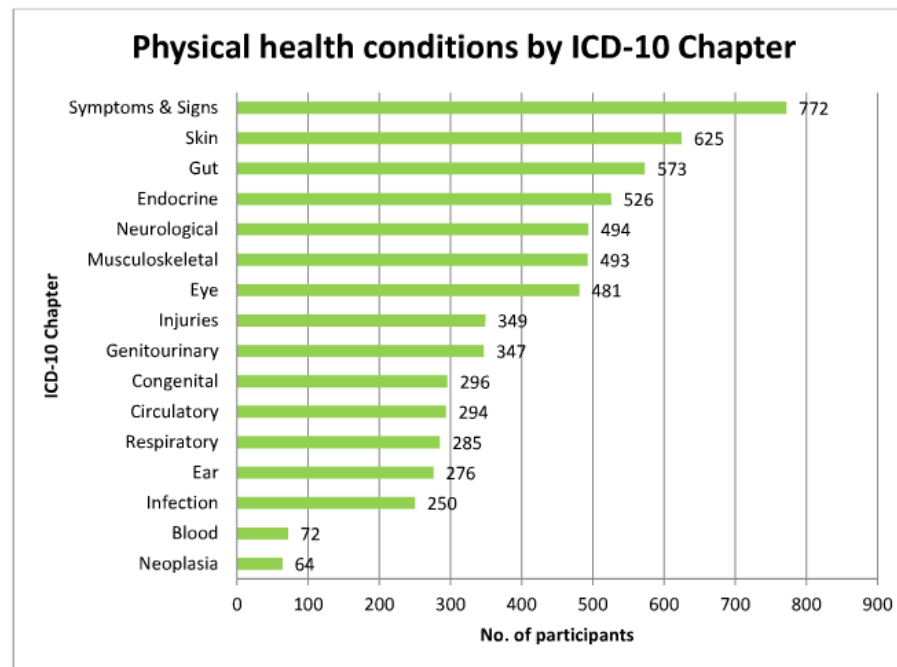
- Accommodation type: 390 live with family carer (38.1%), 102 live independently (10%), 467 live with paid support (45.7%), 64 congregate setting (6.3%)



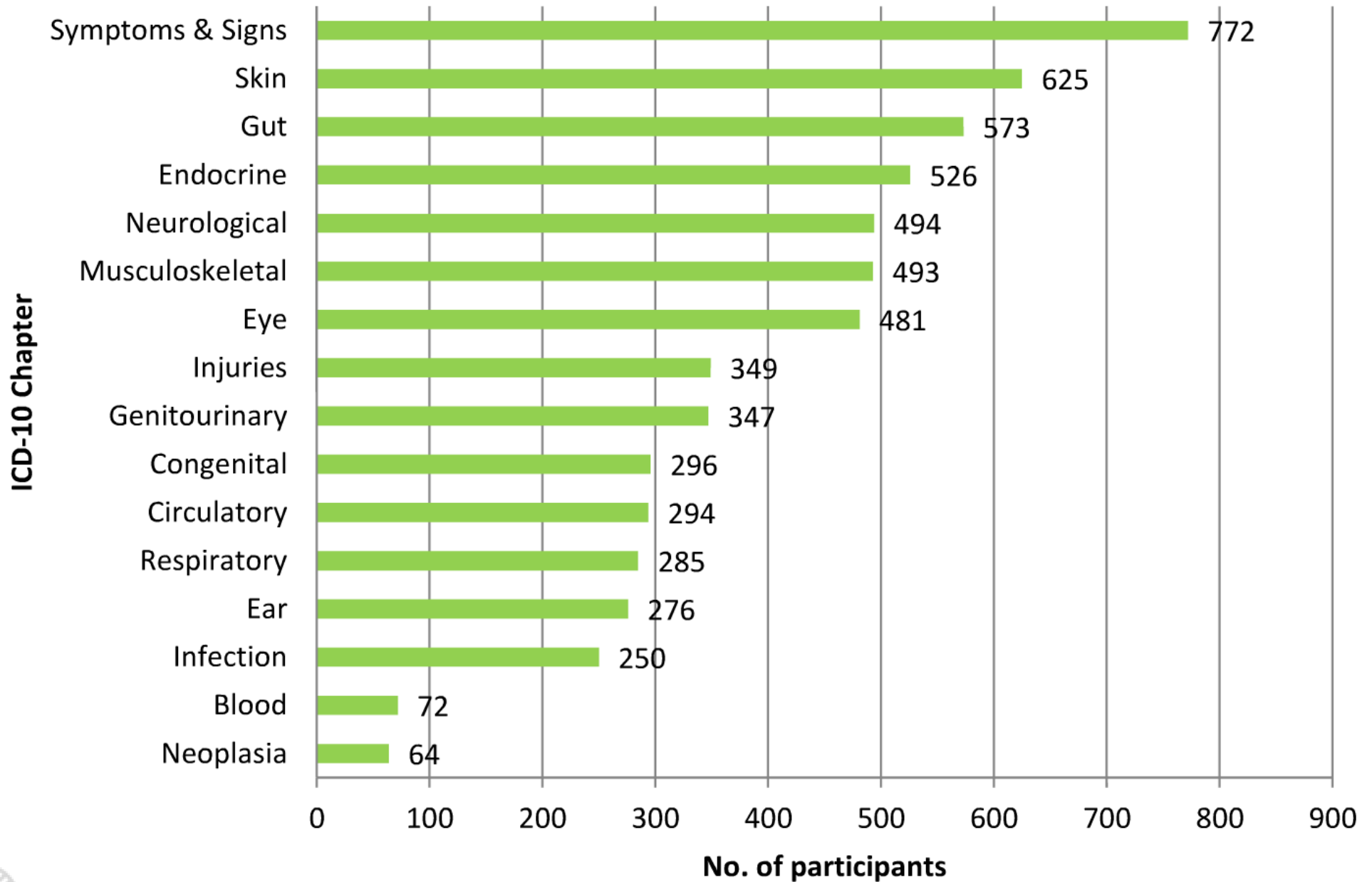
Results

1. What are the most prevalent physical health conditions?

Number of people diagnosed with condition by ICD-10 Chapter



Physical health conditions by ICD-10 Chapter



Examples of physical health conditions from each ICD-10 Chapter

| ICD-10 Chapter | Examples of physical health conditions |
|------------------|--|
| Symptoms & Signs | Ataxic/gait disorders, Dysphagia |
| Skin | Eczema/Dermatitis, Nail disorder |
| Gut | Constipation, Dental/Oral |
| Endocrine | Obesity, Malnutrition |
| Neurological | Migraine, Epilepsy |
| Musculoskeletal | Bone deformity, Arthritis |
| Eye | Cataracts, Glaucoma |
| Injuries | History of soft tissue, History of fracture of forearm |
| Genitourinary | Bladder infection, Urinary Tract Infection |
| Congenital | Congenital heart defect, Congenital intestine disorder |
| Circulatory | Cerebrovascular disorder/stroke, Heart failure |
| Respiratory | LRTI, Asthma |
| Ear | Ear infection, Tinnitus |
| Infection | Fungal infection, Viral infection |
| Blood | Anaemia, White blood disorder |
| Neoplasia | Malignant breast, Malignant brain |



FROM EACH ICD-10 CHAPTER

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Results

1. What are the most prevalent physical health conditions?

| | Physical health condition | n | % |
|----|---|-----|------|
| 1 | Vision impairment | 481 | 47 |
| 2 | Constipation | 366 | 35.8 |
| 3 | Epilepsy | 349 | 34.1 |
| 4 | Ataxic/gait disorders (e.g. lack of muscle co-ordination) | 312 | 30.5 |
| 5 | Hearing impairment | 276 | 26.9 |
| 6 | Nail disorder (e.g. ingrowing nail) | 242 | 23.6 |
| 7 | Epidermal thickening/xerosis | 219 | 21.4 |
| 8 | Cerebral palsy and other paralytic syndromes | 191 | 18.7 |
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| 12 | Dysphagia | 159 | 15.5 |
| 13 | Musculoskeletal pain/dorsalgia | 158 | 15.4 |
| 14 | Bone deformity | 155 | 15.1 |
| 15 | Obesity | 153 | 14.9 |
| 16 | Eczema/Dermatitis | 150 | 14.7 |
| 17 | Gastro-oesophageal reflux disorder | 149 | 14.6 |
| 18 | Lower respiratory tract infection | 134 | 13.1 |
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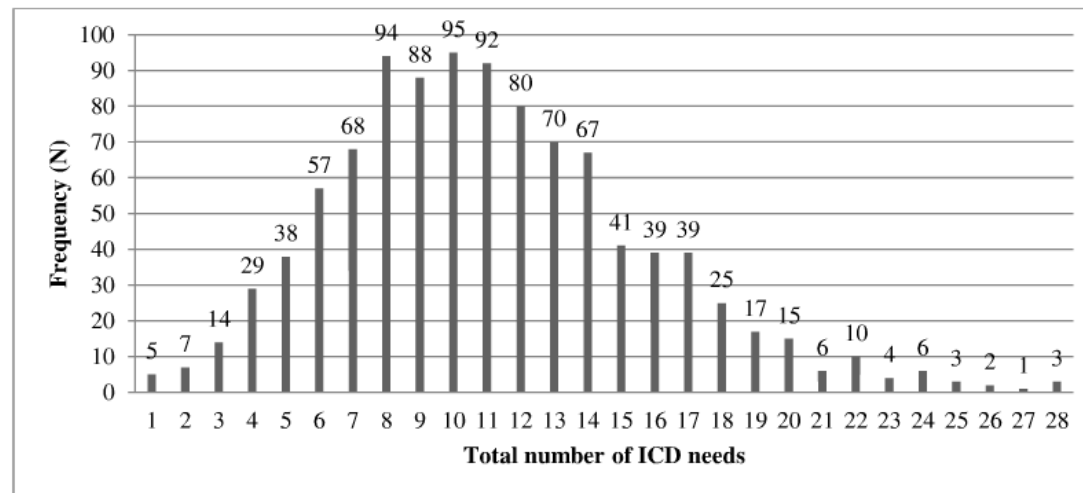
Potentially life threatening and painful/disabling

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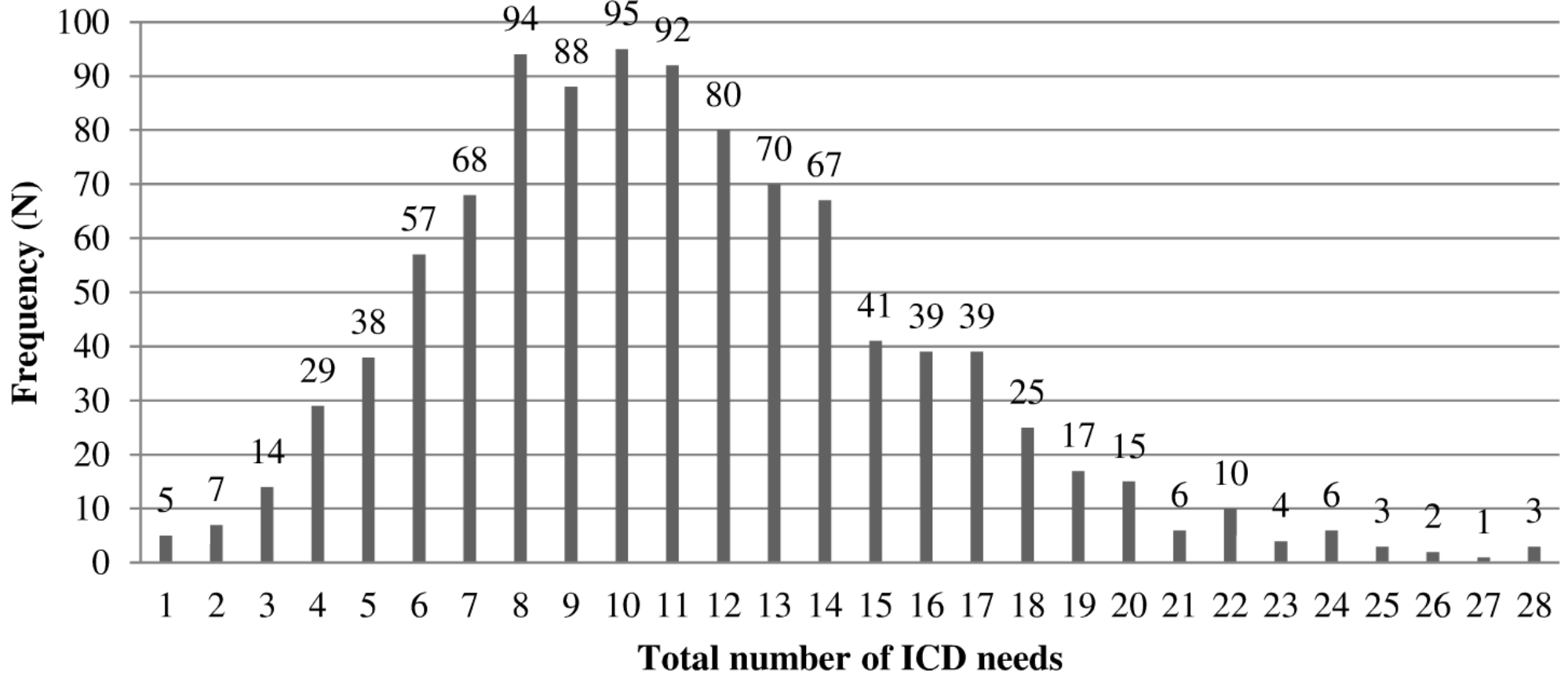
Results

2. What is the extent of multi-morbidity for this cohort?

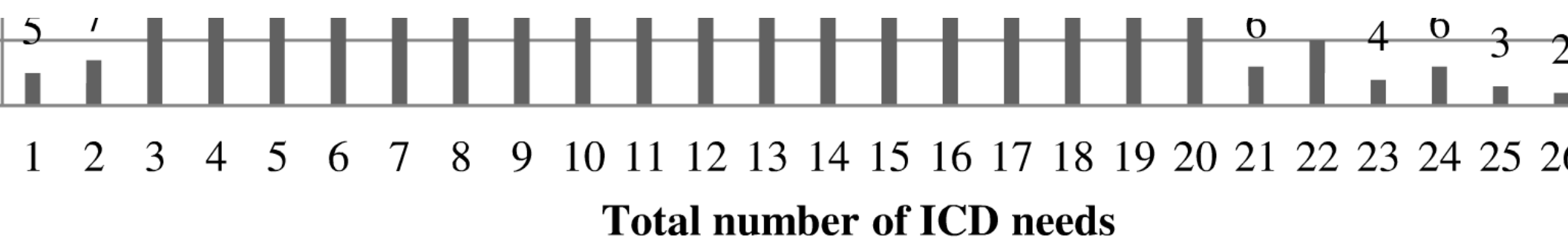


- Total Physical health conditions (M = 11.00, SD = 4.7)
- Males (M = 10.45, SD = 4.52)
- Females (M = 12.02, SD = 3.91)
- 99.2% (n = 1,015) of participants had at least one condition
- 98.7% (n = 1,010) had two or more conditions

2. What is the extent of multi-morbidity for this cohort?



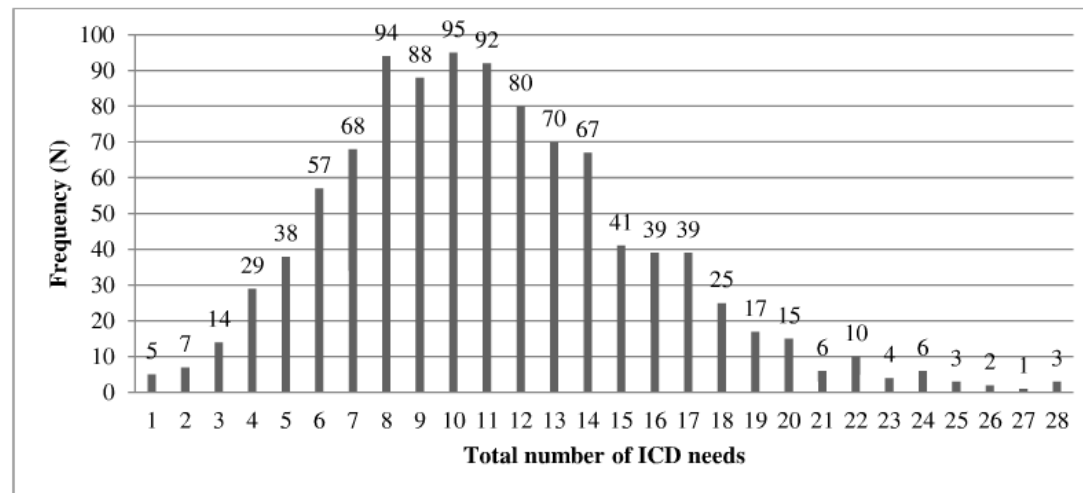
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Strengths and Limitations

Limitations

- Some individuals were still under investigation from the health assessment when data entry was concluded. Therefore there may be an under count of some diagnoses
- Data only carried out in one area of Scotland

Strengths

- First study in Scotland to use a comprehensive health assessment which included the ICD-10 (WHO, 2010) to identify all physical health problems in this population
- Large sample size and high participation rate
- Adds to UK based data by providing prevalence rates on musculoskeletal impairments, constipation and gastro-esophageal reflux disease among people with intellectual disabilities, conditions previously unreported in the UK research literature

Conclusion

This study has reported the high prevalence of physical health problems in this population

The average number of co-morbid conditions was 11

The majority of people with intellectual disabilities had multiple morbidities

All of the conditions reported have a detrimental effect on quality of life and many of them can be treated if identified and reported in time

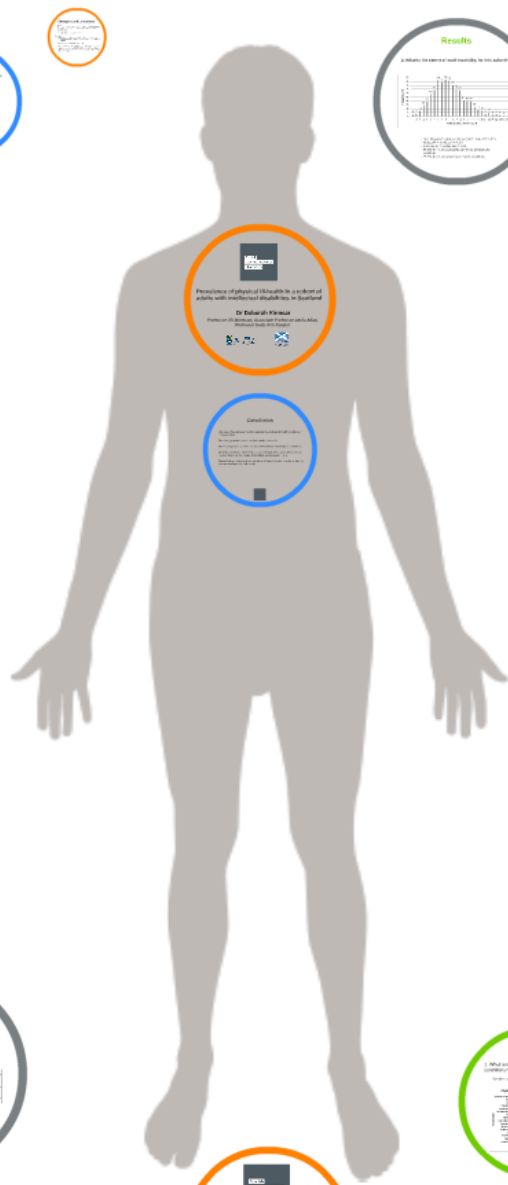
These findings reinforce the importance of health checks in order to identify and meet individual health needs



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Thank you





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Conclusion

Physical disability is common in adults with intellectual disability in Scotland. The prevalence of physical disability is higher in those with intellectual disability than in the general population.

Results

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Results

1. What is the extent of multi-crenality in this cohort?

| Disability | Prevalence (%) |
|---------------|----------------|
| Physical | 15.2 |
| Intellectual | 10.5 |
| Psychological | 8.7 |
| Sensory | 7.3 |
| Communication | 6.1 |
| Multiple | 4.9 |

2. What is the extent of multi-crenality in this cohort?

Results

3. What is the extent of multi-crenality in this cohort?

Background

Physical disability is a common condition in adults with intellectual disability. It is often associated with intellectual disability and can significantly impact quality of life.

Literature

Previous studies have shown that the prevalence of physical disability in adults with intellectual disability is higher than in the general population. However, there is a need for more precise physical health outcomes.

Aim

To report the prevalence of physical disability in a cohort of adults with intellectual disability in Scotland.

Method

A cross-sectional study of 2000 adults with intellectual disability in Scotland. Physical disability was defined as any physical condition that interferes with normal activities of daily living.

Method

Community health assessment
 - Multi-ethnic health assessment
 - Physical disability
 - Psychological disability
 - Sensory disability
 - Communication disability

Research Questions

1. What are the most prevalent physical health conditions?
2. What is the extent of multi-crenality by disability?

Results

Participants

- 2000 adults with intellectual disability
- 1020 males (51.0%) and 980 females (49.0%)
- Mean age: 32.2 years (range 21-83)
- IQ: 45.8 (SD: 15.5)
- 80% living in the community
- 124 (6.2%) with Down syndrome

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Levels of ability (aged 18+)

| Level | Prevalence (%) |
|----------|----------------|
| High | 1.2 |
| Medium | 2.1 |
| Low | 3.5 |
| Very low | 4.8 |
| Severe | 6.1 |
| Profound | 7.3 |

Accommodated (n=100) for with family care (n=100)

| Disability | Prevalence (%) |
|---------------|----------------|
| Physical | 18.5 |
| Intellectual | 12.1 |
| Psychological | 9.8 |
| Sensory | 8.2 |
| Communication | 6.8 |
| Multiple | 5.4 |

Thank you