Trends

Health inequalities and people with learning disabilities in the UK

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Introduction
Research undertaken in many of the world’s high-income countries has reported that people with learning disabilities have poorer health than their non-disabled peers (Sutherland et al, 2002; Ouellette-Kuntz, 2005; Prasher & Janicki, 2003; Emerson et al, 2009; NHS Health Scotland, 2004; Nocon, 2006; Graham, 2005; Krahn et al, 2006; Elliott et al, 2003; US Department of Health & Human Services, 2002; Van Schrojenstein Lantman-de Valk & Walsh, 2008; Turner & Moss, 1966; Van Schrojenstein Lantman-de Valk, 2005; Kerr, 2004; O’Hara et al, 2010). It is clear that the poorer health of people with learning disabilities is, to an important extent, both avoidable and unjust (Ouellette-Kuntz, 2005; Emerson et al, 2009; Nocon, 2006; Graham, 2005; Krahn et al, 2006; O’Hara et al, 2010). As such, these differences in health status represent a health inequality (The Marmot Review, 2010).

In 2002 we undertook a comprehensive review of the UK research literature on the health needs of people with learning disabilities and the response of health services to people with learning disabilities (Elliott et al, 2003). In 2010 we updated this review to include information published since 2002 (Emerson & Baines, 2010). As in the previous review, we focused on information relating to the health needs of people with learning disabilities in the UK. We did, however, draw attention to studies from other countries where they are particularly relevant. This Trends piece summarises what is known about the extent and nature of health inequalities faced by people with learning disabilities in the UK. In a future piece we will summarise what is known about the determinants of these inequalities.

Mortality
People with learning disabilities have a shorter life expectancy and greater risk of early death than the general population (Hollins et al, 1998; McGuigan et al, 1995). Life expectancy is increasing, in particular for people with Down syndrome, and there is some evidence to suggest that for people with mild learning disabilities it may be approaching that of the general population (Puri et al, 1995). All-cause mortality rates among people with moderate to severe learning disabilities are three times as high as in the general population, mortality being particularly high for young adults, women and people with Down syndrome (Tyrer & McGrother, 2009).

General health status
The risk of children being reported by their main carer (usually their mother) to have fair/poor general health is 2.5–4.5 times as great for children with learning disabilities as for others.
children (Emerson & Hatton, 2007a, 2007c). One in seven adults with learning disabilities rates their general health as not good (Emerson & Hatton, 2008). These may be under-estimates of the poorer health of people with learning disabilities, because carers of people with learning disabilities tend to perceive the person they care for to be healthier than suggested by the results of medical examination (Wilson & Haire, 1990; Beange et al, 1995). Health screening of adults with learning disabilities registered with GPs reveals high levels of unmet physical and mental health needs (Robertson et al, 2010).

Cancer
Overall, the incidence of deaths from cancer in the UK among people with learning disabilities is currently lower than in the general population (12–18% vs 26%), although people with learning disabilities have proportionally higher rates of gastrointestinal cancer (48–59% vs 25% of cancer deaths) (Jancar, 1990; Cooke, 1997; Duff et al, 2001). However, the incidence and pattern of cancer amongst people with learning disabilities are rapidly changing, due, in part, to increased longevity (Jancar, 1990; Cooke, 1997; Duff et al, 2001). Children with Down syndrome are at particularly high risk of leukaemia compared with the general population, although the risk of solid tumours, including breast cancer, is lower (Hasle et al, 2000; Hermon et al, 2001). There is a high prevalence of helicobacter pylori, a carcinogen linked to stomach cancer, gastric ulcer and lymphoma, among people with learning disabilities (Hogg & Tuffrey-Wijne, 2009).

Coronary heart disease
Coronary heart disease is a leading cause of death among people with learning disabilities (14–20%) (Hollins et al, 1998), and rates are expected to increase due to increased longevity and lifestyle changes associated with community living (Wells et al, 1995). Almost half of all people with Down syndrome are affected by congenital heart defects (Brookes & Alberman, 1996; Hermon et al, 2001).

Respiratory disease
Respiratory disease is possibly the leading cause of death for people with learning disabilities (46–52%), with rates much higher than for the general population (15–17%) (Hollins et al, 1998; Puri et al, 1995). People with asthma and learning disabilities were found to be twice as likely to be smokers as patients with learning disabilities who do not have asthma. More than half of women with learning disabilities and asthma are also obese (Gale et al, 2009).

Mental health and challenging behaviour
The prevalence of psychiatric disorders is 36% among children with learning disabilities, compared to eight per cent among children without learning disabilities, children with learning disabilities accounting for 14% of all British children with a diagnosable psychiatric disorder (Emerson, 2003; Emerson & Hatton, 2007b). Increased prevalence of psychiatric disorder is particularly marked for autistic spectrum disorder (OR 33.4), ADHD (OR 8.4) and conduct disorders (OR 5.7) (Emerson, 2003; Emerson & Hatton, 2007b). The prevalence of psychiatric disorders is also significantly higher than general population rates among adults whose learning disabilities are indentified by GPs (Cooper et al, 2007a, 2007b; Singleton et al, 2001). Challenging behaviours are shown by 10–15% of people with learning disabilities, age-specific prevalence peaking between ages 20 and 49 (Holden & Gitlesen, 2006; Emerson & Einfeld, in press; Emerson et al, 2001; Cooper et al, 2009a, 2009b; Lowe et al, 2007). In some instances challenging behaviours result from pain associated with untreated medical disorders (Ryan & Sunada, 1997; Emerson & Einfeld, in press; Kwok & Cheung, 2007). Reported
prevalence rates for anxiety and depression among adults with learning disabilities vary widely, but are generally reported to be at least as prevalent as in the general population and higher among people with Down syndrome (Mantry et al., 2008). There is some evidence that the prevalence rates for schizophrenia in people with learning disabilities are approximately three times as great as for the general population, with higher prevalence rates for South Asian adults with learning disabilities than for white adults with learning disabilities (Chaplin et al., 1996; Doody et al., 1998).

**Dementia**
The prevalence of dementia is higher among older adults with learning disabilities than in the general population (22% vs 6% aged 65+), and is associated with a range of potentially challenging behaviours and health problems (Cooper, 1997a, 1997b). People with Down syndrome are at particularly high risk of developing dementia, the age of onset being 30–40 years younger than that for the general population (Holland et al., 1998). Among people with moderate to profound learning disabilities, deaths from dementia are more common in men than women (Tyrer & McGrother, 2009).

**Epilepsy**
The prevalence of epilepsy among people with learning disabilities is at least 20 times as high as for the general population, and seizures are commonly multiple and resistant to drug treatment (Amiet et al., 2008; Branford et al., 1998; Matthews et al., 2008). Uncontrolled epilepsy can have serious negative consequences for both quality of life and mortality (Kerr & Bowley, 2001a; Kerr & Bowley, 2001b).

**Sensory impairments**
People with learning disabilities are 8–200 times as likely to have a vision impairment as the general population (Carvill, 2001). Approximately 40% of people with learning disabilities are reported to have a hearing impairment, and people with Down syndrome are at particularly high risk of developing vision and hearing loss (Carvill, 2001). Those living independently or with family are significantly less likely to have had a recent eye examination than those living with paid support staff (Starling et al., 2006). Carers frequently fail to identify sensory impairments, including cerebral visual impairment, among people with learning disabilities whom they are supporting (Evenhuis, 2001; Kerr et al., 2003; Warburg, 2001).

**Physical impairments**
Among adults with learning disabilities, being non-mobile has been associated with a sevenfold increase in death, and being partially mobile has been associated with a twofold increase of death when compared with being fully mobile (Tyrer & McGrother, 2009). A population-based study in the Netherlands reported that people with learning disabilities are 14 times as likely to have musculo-skeletal impairments (van Schrojenstein Lantman De Valk et al., 2000).

**Oral health**
One in three adults with learning disabilities and four in five adults with Down syndrome have unhealthy teeth and gums (Barr et al., 1999), adults living with families having more untreated decay and poorer oral hygiene, and adults living in residential services having more missing teeth (Tiller et al., 2001).

**Dysphagia**
Difficulties with eating, drinking and swallowing have implications for health, safety and well-being. Among adults with learning disabilities, 40% of people with dysphagia experience recurrent respiratory tract infections. Other negative health consequences of dysphagia include asphyxia, dehydration and poor nutritional status (Chadwick & Jolliffe, 2009).
Diabetes
Increased rates of diabetes among adults with learning disabilities have been reported in a population-based study undertaken in the Netherlands (Straetmans et al., 2007). We are not aware of any UK data on the prevalence of diabetes among people with learning disabilities.

Gastro-oesophageal reflux disease (GORD)
GORD causes pain and may contribute to sleep disturbance, problem behaviour, anaemia and risk of oesophageal cancer (NHS Health Scotland, 2004). Close to half of a sample of institutionalised people with moderate and severe learning disabilities in the Netherlands were found to have GORD (Böhmer et al., 1999). We are not aware of any UK data on the prevalence of GORD among people with learning disabilities.

Constipation
Constipation has been reported in two-thirds of a sample of institutionalised people with moderate and severe learning disabilities in the Netherlands (Böhmer et al., 2001). We are not aware of any published UK data on the prevalence of constipation among people with learning disabilities. However, an unpublished study has reported rates of constipation in the previous year ranging from 17% to 51% among adults with learning disabilities in varying types of supported accommodation (Emerson et al., 1999).

Osteoporosis
Studies from Australia and the USA indicate that people with learning disabilities may have increased prevalence of osteoporosis and lower bone density than the general population (Center et al., 1998; Tyler et al., 2000; Jaffe et al., 2001). Contributory factors include lack of weight-bearing exercise, delayed puberty, earlier-than-average age at menopause for women, poor nutrition and being underweight. Fractures can occur with only minor injury and can be multiple (NHS Health Scotland, 2004). We are not aware of any UK data on the prevalence of osteoporosis among people with learning disabilities.

Endocrine disorders
Hypothyroidism is relatively common among people with Down syndrome, prevalence increasing with age. Prevalence rates in children with Down syndrome have been reported to range from 9–19% (Gibson et al., 2005; Pueschel et al., 1991; Noble et al., 2000). A prevalence rate of 22% has been reported in an institutionalised population of adults with Down syndrome (Mani, 1988).

Injuries, accidents and falls
High rates of accidents and injuries among people with learning disabilities, including injuries from falls, have been reported in studies undertaken in Canada, Australasia, the Netherlands and the US (Grant et al., 2001; Hsieh et al., 2001; Sherrard et al., 2002; Janicki et al., 2002; Wagemans & Cluitmans, 2006). In Denmark and Australia, accidents have been reported to be a more common cause of death among people with learning disabilities than in the general population (NHS Health Scotland, 2004). We are not aware of any UK data on the prevalence of injuries, accidents or falls among people with learning disabilities.

Conclusion
UK research has consistently highlighted the relatively poor health of people with learning disabilities in numerous aspects of health. These differences in health status begin at an early age. In a forthcoming Trends we will summarise what is known about the determinants of these health inequalities and outline what needs to be done to reduce them.
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