

## **R039: Sleep medication use in Cerebral Palsy: a comparison between those with Cerebral Palsy and the typically developing population in Northern Ireland – QUB**

Cerebral palsy (CP) is a disorder of movement and posture caused by injury to the brain or problems with its development. CP is the leading cause of childhood physical disability, affecting 1 in 500 children worldwide (Novak et al., 2017) and 60 children each year in Northern Ireland (Perra et al., 2016). Sleep disturbances (SD) affect 23% of children with CP compared to 5% of children without CP (Newman et al., 2006) and impact a child's life cognitively, emotionally and functionally. Sleep disorders are one of the top 10 childhood disability research priority areas according to the James Lind Alliance, yet few studies examining sleep medications in CP have been reported (Long, 2017).

This study aims to address this by determining if people with CP are dispensed a greater number of sleep medications compared to the general population. The association between clinical factors related to CP such as level of motor impairment and sleep medication use will also be investigated.

### Primary research question:

Do individuals with CP get prescribed a greater range of medications to help with their sleep compared to those without CP? And if so, are these sleep medications prescribed more frequently and at a higher dosage?

### Secondary research questions:

1. How many people (born between 1981 and 2011) resident in Northern Ireland are prescribed medication that may assist with sleep, specifically, Clonidine, Chloral Hydrate, Melatonin, Alimemazine Tartrate. (This list was finalised after reviewing up-to-date literature on the use of sleep medications in CP and following consultation with a Paediatrician familiar with this population and their presentation).
2. How many people with CP (born between 1981 and 2011) are prescribed medication between January 2016 and December 2017 that may assist with sleep, specifically, Clonidine, Chloral Hydrate, Melatonin, Alimemazine Tartrate.
3. Is there a difference between how regularly sleep medications are dispensed for those with CP and those in the typically developing population between January 2016 and December 2017? And is there a difference in the strength of these medications prescribed to these two groups i.e. CP vs non-CP?
4. What clinical factors in CP are associated with receipt of prescribed sleep medications i.e. is there a link between a child's Gross Motor Function Classification System (GMFCS) level/severity, night-time medical management, co-morbidities etc. and the range, dosage and frequency of sleep medications dispensed to those with CP?