

Melatonin prescribing practices and the provision of sleep hygiene/parent-led sleep behavioural Interventions in S-CAMHS, ABUHB (Aneurin Bevan University Health Board)

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INTRODUCTION

Insomnia is a common condition in children, especially those with neurodevelopmental disorders¹. It is managed using non-pharmacological (such as parent-led sleep behavioural interventions, regular sleep hygiene advices) and pharmacological (with melatonin preparations) strategies. Whilst the use of melatonin in children is off licence in the UK, it is noted that that this drug is frequently prescribed to children under the care of S-CAMHS. This service evaluation looks at the current prescribing practices for melatonin and provision of non-pharmacological interventions in S-CAMHS, Aneurin Bevan University Health Board (ABUHB), South Wales, and is also intended to highlight any areas of improvement to service provision.

AIMS

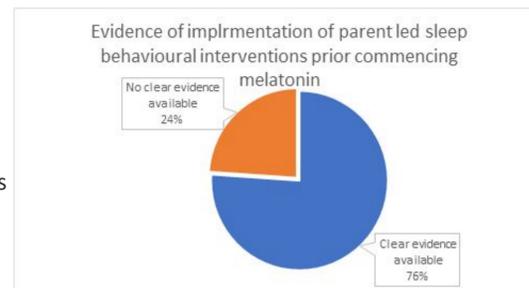
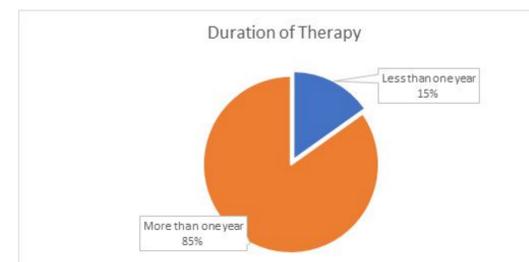
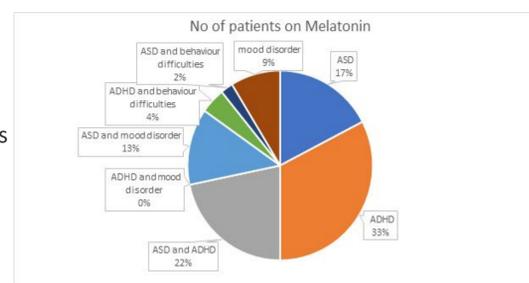
1. To identify the number of patients currently prescribed melatonin (hence, infer the prescribing rates)
2. To determine the average duration of use of melatonin in patients under the care of S-CAMHS in ABUHB
3. To investigate whether:
 1. behaviour interventions were tried prior to commencing melatonin
 2. if sleep hygiene advice was given during the initial appointment with the clinician
 3. if these interventions were reinforced from time to time
4. To identify any potential areas of improvement to service provision

METHOD

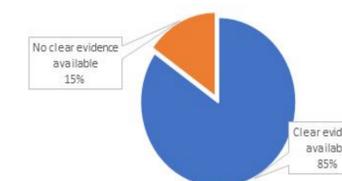
This service evaluation was conducted at Ty Bryn Unit, St. Cadoc's Hospital, during the month of January, 2021. S-CAMHS database (for patients currently on medications) was used and it was found that there are total 346 patient currently being managed with pharmacological therapies. Out of the total, 115 are currently on melatonin. From these 115 patients currently on melatonin, 57 were randomly selected as a sample for this this project. Patient notes (hard copies) and EPEX software were also used to collect information regarding the sleep management practices.

RESULTS

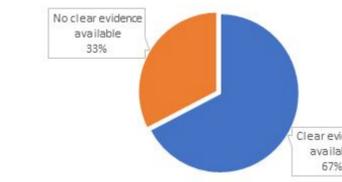
1. It was noticed that within the sample, only 46 patients were actively on melatonin. Melatonin is prescribed for sleep related issues in ASD (8/46), ADHD (15/46), ASD and ADHD (10/46), ADHD and mood disorder (0/46), ASD and mood disorder (6/46), ADHD and behaviour difficulties (2/46), ASD with behaviour difficulties (1/46), mood disorder (4/46).
2. 39/46 patients are currently on melatonin for more than a year (85%).
3. 35 patients (76%) reported improved sleep from melatonin.
4. Evidence for implementation of parent-led sleep behavioural interventions:
 5. Prior to commencing melatonin- Clear evidence available for 35 patients only (76%). These interventions were however not deemed helpful by most of the service users.
 6. While prescribing melatonin- Clear evidence available for 39(85%) patients. Evidence base for melatonin was also discussed during this visit.
 7. During last follow up visit- Evidence available for 31 patients only (67%).



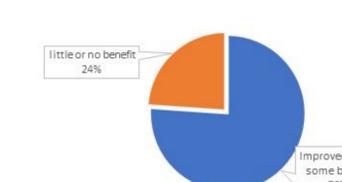
Evidence for discussion around sleep hygiene and evidence base for melatonin while prescribing melatonin



Evidence for sleep hygiene advice given during last follow up visit



Service user reported outcome from Melatonin therapy



RECOMMENDATIONS

1. The quality of sleep hygiene/parent-led sleep behavioural interventions offered prior to commencement of melatonin therapy should be assessed and improved if needed
2. Formal group sessions/workshops on sleep hygiene/parent-led sleep behavioural interventions at regular intervals might be useful to empower the service users with evidence-based interventions. This will not only help improve the quality of sleep but also reduce the chances of staying on long term polypharmacy and/or unlicensed medication. This might also reduce the time spent by clinician on reiterating the sleep hygiene strategies during follow up patient encounters
3. Use of outcome measures such as the Child Sleep Habits Questionnaire at regular intervals could be helpful in assessing the effect of future educational/pharmacological interventions
4. During the data collection it was noticed that the S-CAMHS database (for patients actively on medications) needs a review and update. This will help avoid errors in future data collection and analysis

CONCLUSIONS

Whilst long term benefit and risk from melatonin therapy remain widely unclear, it is evident from the findings that majority of patients under S-CAMHS, ABUHB remain on melatonin therapy for longer than one year. Most of these patients have reported benefit from this therapy and preferred to remain on it despite being informed about the limited evidence base for melatonin. These patients were also advised on the importance of sleep hygiene and parent-led sleep behavioural interventions at follow up visits.

There is evidence for implementation of parent-led sleep behavioural interventions prior to prescribing melatonin and these should be appropriately introduced and assessed as part of a future quality improvement project.

REFERENCES

1. McDonald A, Joseph D. (2019) Paediatric neurodisability and sleep disorders: clinical pathways and management strategies. *BMJ Paediatrics Open* 2019;3:e000290. doi:10.1136/bmjpo-2018-000290
2. Paediatric Formulary Committee. BNF for Children (online) London: BMJ Group, Pharmaceutical Press, and RCPCH Publications <<http://www.medicinescomplete.com>> [Accessed on 19.01.21] and Paediatric Formulary Committee. BNF for Children [edition 2016-17]. London: BMJ Group, Pharmaceutical Press, and RCPCH Publications; [2016]
3. Taylor, D., Barnes, T. and Young, A. (2018). *The Maudsley Prescribing Guidelines in Psychiatry* (13th Edition)
4. National Institute for Health and Care Excellence. (2013). *Sleep disorders in children and young people with attention deficit hyperactivity disorder: melatonin- Evidence summary [ESUOM2]* Retrieved from <https://www.nice.org.uk/advice/esuom2/chapter/overview-for-healthcare-professionals>
5. Gringras et al (2017). Efficacy and Safety of Pediatric Prolonged-Release Melatonin for Insomnia in Children With Autism Spectrum Disorder; DOI: 10.1016/j.jaac.2017.09.414
6. Maras et al (2018). Long-Term Efficacy and Safety of Pediatric Prolonged-Release Melatonin for Insomnia in Children with Autism Spectrum Disorder; doi: 10.1089/cap.2018.0020. Epub 2018 Oct 11.

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