

Title: ADHD and Ritalin

Wards affected: All wards

To: Overview and Scrutiny On: 14<sup>th</sup> December, 2011

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## 1. Key points and Summary

- 1.1 This report is a written response to the paper submitted by Cllr Parrott in October. It seeks to provide Overview and Scrutiny with assurance on the evidence base around ADHD.
- 1.2 This report follows two pre-meetings where Dr Larine Dibble, Designated Doctor for Safeguarding Children, has been available to speak to members and answer questions on the procedures followed in Torbay.

## 2. Introduction

- 2.1 Attention deficit hyperactivity disorder (ADHD) is a behavioural syndrome characterised by the core symptoms of inattention, hyperactivity and impulsivity. These features can persist over time and impair development and social achievement. There is evidence that over time, individuals with ADHD could be more likely to have substance misuse disorders and be involved in criminal activity.
- 2.2 The National Institute for Health and Clinical Excellence (NICE) has published national guidelines for the diagnosis and management of this condition (number 72). These are based on an extensive review of published literature and the evidence base.
- 2.3 Ritalin (Methylphenidate) is a drug treatment which can be prescribed for specific levels of impairment as part of the overall treatment plan.
- 2.4 Whilst the evidence base supports the use of medication in the short term, there is less evidence on the balance and risks of long-term drug treatment, the optimum duration of treatment and when it is appropriate to consider drug discontinuation. Taking all the evidence into account however, NICE does recommend the use of drug treatment for children with persisting significant impairment.

## 3. Diagnosis and management

- 3.1 In line with the NICE guidelines published in 2009, diagnosis of ADHD for children within Torbay is undertaken by either a Community Paediatrician or a consultant in the Child and Adolescent Mental Health Service (CAMHS). Local GPs do not diagnose but may continue prescriptions following diagnosis by the specialist medical consultants.
- 3.2 Treatment for ADHD is not restricted to medication such as Ritalin but also includes psychological, behavioural and educational advice and interventions in line with the NICE guidelines.
- 3.3 Assessment and diagnosis in Torbay is set out in a 'map of medicine' pathway for ADHD. This is a clinical pathway that clinicians in primary and secondary healthcare follow which incorporates the different NICE publications relevant to this area. It will be

reviewed as further evidence based guidance is produced. Prescribing guidelines for Ritalin are established in the local Drugs Formulary.

- 3.4 Local health providers have piloted the use of an additional assessment tool and recently appointed a joint paediatric/CAMHS trained nurse who has contributed to assessment by direct observations at home and school. This post also provides the clinical lead in targeted parenting groups and contributes to the education of many local professional groups. As with other conditions, medical consultants are able to discuss cases and professional practice amongst the team.
- 3.5 As part of the formulation of NICE guidelines a qualitative focus study group was commissioned to research the views and experiences of children taking medication for ADHD. The study findings are set out in the guidelines and include the following:
- ‘The children associated their tablets primarily with helping to improve their social and disruptive behaviour and, consequently, relationships with peers (as opposed to improving their school work and academic functioning).’
  - ‘Children reported experiences of stigma as a direct result of taking tablets; however, experiences of stigma as a result of ADHD diagnosis and symptomatic behaviours were far more frequently expressed. Feelings of being different and alienated were also stronger around diagnosis and ADHD behaviours, than around the need for medication.’

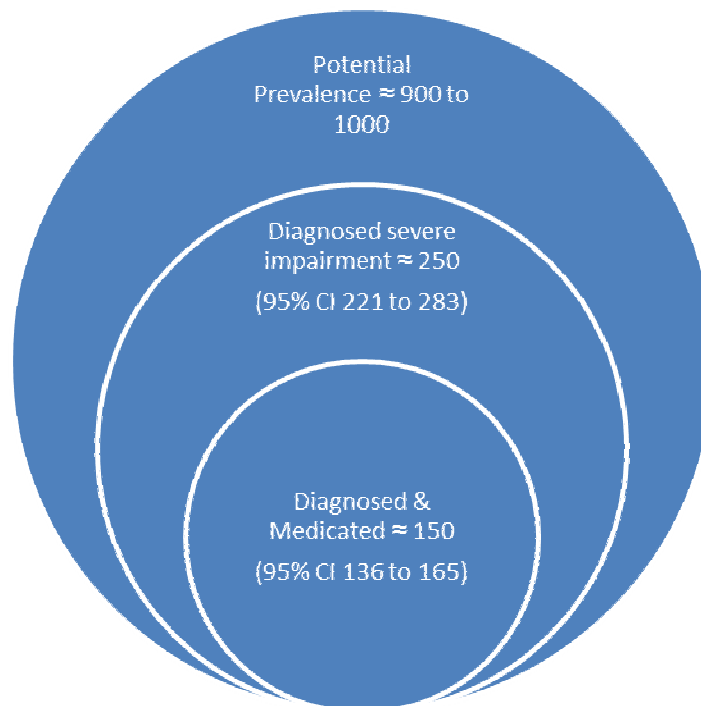
#### **4. Expected prevalence**

- 4.1 There are no registers of patients diagnosed with ADHD or prescribed Ritalin, within Torbay or nationally. Only a small set of conditions are the subject of GP registers and ADHD is not one of them.
- 4.2 Any data collected in Torbay cannot be benchmarked against data in other areas, as data on ADHD is not collected in other areas. There are however, national and international studies that have been reviewed by the Public Health epidemiologist to provide some possible parameters for our local population.
- 4.3 Research in the published literature suggests that the total prevalence of ADHD in children and adolescents ranges from 3% to 8% (Foisly et al, 2011), and individual community studies have reported prevalence rates between 1.7% and 26% (Bruckner et al, 2011). NICE guidance suggests estimates of around 5% of school aged children and adolescents that would meet the diagnostic criteria for ADHD (NICE, 2006). If we were to assume that around 5% of 5 to 16 year old children and adolescents in Torbay could have ADHD, we might expect around 900 to 1,000 to be the potential prevalence in this area. However, it must be stressed that under different criteria from different studies, the potential population prevalence could be both higher and lower than the 900 to 1,000 suggested.
- 4.4 Not all children in the population with ADHD come forward for actual diagnosis or treatment. A study quoted in NICE guidelines that was undertaken in Newcastle and published in 2004 found prevalence for severe impairment at 1.4% and 4.2% for moderate impairment (McArdle, 2004). Severe ADHD corresponds approximately to the diagnosis of hyperkinetic disorder, when hyperactivity, impulsivity and inattention are all present in multiple settings and when impairment is severe.
- 4.5 Whilst we cannot be totally certain that all children with severe or moderate impairment would come to the attention of the medical community, it is likely that those with severe impairment would have behaviour that would be very noticeable. If we assume the

figures for Newcastle as transferable and representative of Torbay's population, we could use the 1.4% estimate for severe impairment and expect around a 250 (95% CI 221 to 283) 5 to 16 year olds to actually be diagnosed with ADHD. If we included moderate impairment, we would expect much higher numbers of children to be diagnosed.

4.6 In school-age children and young people with severe ADHD, drug treatment should be offered as the first-line treatment (NICE, 2009). Drug treatment should only be initiated by an appropriately qualified healthcare professional with expertise in ADHD and should be based on a comprehensive assessment and diagnosis (NICE, 2009). In recent years there has been an increase in the clinical recognition of ADHD with a corresponding rise in the numbers diagnosed and treated, from an estimate of 0.5 per 1,000 children diagnosed in the UK 30 years ago, to more than 3 per 1,000 receiving medication for ADHD in the late 1990's (Atkinson et al, 2009). More recently, a study by Visser in 2007 (Visser et al, 2007) suggests that around 60% (58%) of those diagnosed with ADHD were undertaking medication at the time of the study. Again, if we assume that those diagnosed and medicated within Torbay is similar to the figures presented by Visser, we might expect around 150 children and adolescents (95%CI 136 to 165) to be medicated. The NICE technology appraisal (NICE, 2006) concluded that the medications are effective in controlling the symptoms of ADHD relative to no treatment.

Figure 1: Illustrative breakdown of expected ADHD prevalence for children in Torbay.



## 5. Actual data for Torbay

5.1 Comparative data on actual overall prevalence in local populations is not available.

5.2 Data on the number of patients diagnosed with ADHD, that could be used to compare Torbay against other areas, is not available. This data is not routinely collected. This data could be requested from local GPs but data for one area only would not, in my opinion, enable the Public Health team to make an effective assessment of the

comparative position for Torbay. GP data on diagnosed cases could be compared to the parameters set out in 4 above, but this would be an indication only, not a full standardised comparison which would require details on age for both the local data and the studies we would be comparing to.

5.3 There is trend data available for numbers of prescriptions of medication such as Ritalin. This is not a proxy for the number of children as any one script could represent a different number of days, i.e. one script could represent 56 days, two could be for 28 days each. In addition, you would expect to see an increasing number of prescriptions as new children are prescribed this treatment and older ones continue. Similar increases would have been seen with the introduction of statins for heart disease or new cancer drugs.

## 6. Call for action

6.1 In response to the specific questions posed in Cllr Parrott's report:

- Electronic prescription data for ADHD medication, including Ritalin, is available from 2007/08. As detailed above, it is not a proxy for numbers of children but represents scripts issued which could be for different time periods.
  - 2007/08 = 2,487 scripts
  - 2008/09 = 2,964
  - 2009/10 = 3,129
  - 2010/11 = 3,239
- The numbers of children on medication cannot be calculated from the above.
- The increase in prescriptions is 30%.
- It is not possible to compare prescription data between areas.
- Alternatives to medication are set out in NICE guidance and the local care pathway. These include supported parenting, behavioural support, social care support, educational psychology, child and family guidance. Medication is recommended for children with persisting severe impairment.
- The Torbay Drug & Alcohol Action Team is not aware of any adult presenting to treatment services with a reported methylphenidate misuse issue.

## 7. Safeguarding Considerations

7.1 There have been concerns raised nationally and internationally in the media about the long term use of medication to treat ADHD. Within the NICE guidelines, medication is recommended for children with severe impairment. No verifiable evidence is available to suggest that this guideline is not being followed locally.

7.2 Conversely, there has also been some international media debate about the potential safeguarding concerns that could arise if vulnerable children are taken off medication which has been prescribed by professionals for the treatment of ADHD.

7.3 Children have reported being stigmatised in relation to taking medication. However, in a study commissioned by NICE, the experiences of stigma as a result of ADHD diagnosis and symptomatic behaviours were far more frequently expressed.

7.4 Studies have shown that children with ADHD are more likely over time to use illegal substances and be involved in criminal activity. Appropriate diagnosis and treatment can mitigate these behaviours.

7.5 Local media coverage of the debate in Torbay has used emotive headlines such as 'chemical cosh' and questioned '...doctors and teachers conspiring to abuse children'. There is no clinical evidence currently available on the impact locally of this coverage.

## 8. Summary

8.1 Diagnosis of ADHD and treatment is undertaken in Torbay by professional consultant-level medical staff in line with current national guidelines from NICE. Treatment may include Ritalin but this is not the only regimen available.

8.2 Parents should be encouraged to follow treatment regimens as set out by medical consultants. Treatment for ADHD will be recommended on the basis of impairment and may or may not include medication.

8.3 There is no data available in Torbay on total population prevalence, numbers diagnosed or medicated, that could be used for comparative purposes. This data is not collected in other areas. A review of the literature has been used to provide potential parameters for the Torbay population. There is no evidence that Torbay exceeds these parameters.

## References

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