## Incidence of Anorexia Nervosa and the Prescribing of Psychotropic Medications From UK Primary Care, 1996–2016: a Retrospective Database Study

M.Y. Beykloo<sup>a</sup>, D. Nicholls<sup>b</sup>, I.C.K. Wong<sup>a,c</sup>, M. Simic<sup>d</sup>, E. Mills<sup>a</sup>, R. Brauer<sup>a</sup>

<sup>a</sup>University College London (UCL) <sup>b</sup>Imperial College London <sup>c</sup>University of Hong Kong <sup>d</sup>South London and Maudsley NHS Foundation Trust

**Introduction:** Anorexia nervosa (AN) is a psychiatric disorder characterised by restrictive eating and an intense fear of weight gain. The most recent study reporting the incidence of AN was conducted using primary care records from 2000 to 2009 and found the incidence to be stable by gender despite minor fluctuations across the years. There is currently a lack in evidence for the efficacy of psychotropic medications in AN; however, they are sometimes prescribed if there is a less than optimal treatment response with first line psychological treatments. There's a call for greater understanding of psychotropic prescribing in individuals AN within the United Kingdom (UK) in order to deliver empirical evidence and provide guidance for their use in clinical practice.

**Aim:** This study aimed to comprehensively assess trends in the incidence of AN in order to provide up-to-date results and to measure the use of psychotropic medications in individuals with AN over two decades.

**Methods:** A retrospective database study was conducted using The Health Improvement Network (THIN) database which consists of anonymised medical records from general practices throughout the UK. Individuals aged 12–50 years and with recorded AN diagnosis were identified between 1996 and 2016. The incidence of AN were calculated annually and Kaplan Meier analyses were used to measure the prescribing duration and cessation of psychotropic medications in this cohort. The results were stratified by gender and age groups in accordance with UK clinical care guidelines. Ethical approval for the study was granted by the Scientific Review Committee (SRC) of IQVIA, with reference number 17THIN063.

**Results:** A total of 17,597 individuals were identified from 1996 to 2016, of which 80.28% were females. The incidence of AN remained fairly constant for females and males from an overall incidence of 15.21/100,000 person years in 1996, to 21.84/100,000 person years in 2006, followed by a decrease in 2016 to 18.25/100,000 person years. Almost half of individuals with AN (47.44%) received a prescription for psychotropic medication in the study period. Most individuals receiving medication were prescribed antidepressants (98.13%), whilst under a fifth (17.29%) were prescribed antipsychotics. The most common antidepressant prescribed was fluoxetine (59.73%) and the most common antipsychotic was olanzapine (8.90%). Under half of individuals (46%) initiated on a psychotropic medication continued with a psychotropic prescription after six months.

**Discussion/Conclusion:** This study provides the most up-to-date trends for AN incidence and highlights the use of psychotropic medications for the treatment of AN in UK primary care, despite lack of sufficient evidence. The prescribing pattern of psychotropic medications in this study is in line with our previous study.<sup>3</sup> As our study is limited to patient data as recorded in primary care, we call for greater investigations into the benefits and harms associated with psychotropic medications in this population.

## References

- 1. Fazeli, P. K., Calder, G. L., Miller, K. K., Misra, M., Lawson, E. A., Meenaghan, E., Lee, H., Herzog, D. & Klibanski, A., Psychotropic medication use in anorexia nervosa between 1997 and 2009, Int J Eat Disord, 2012, 45, 970–976.
- 2. Micali, N., Hagberg, K. W., Petersen, I. & Treasure, J. L., The incidence of eating disorders in the UK in 2000–2009: findings from the General Practice Research Database, BMJ Open, 2013, 3.
- 3. Y Beykloo, M., Nicholls, D., Simic, M., Brauer, R., Mills, E. & Wong, I. C. K., Survey on self-reported psychotropic drug prescribing practices of eating disorder psychiatrists for the treatment of young people with anorexia nervosa, BMJ Open, 2019, 9, e031707.