

**Media Release: European College of Neuropsychopharmacology (ECNP)**

*“For the science and treatment of disorders of the brain”*

## **[Women in poor areas twice as likely to develop clinical anxiety as men](#)**

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Women living in poor areas in the UK are almost twice as likely to develop clinical anxiety as women in richer areas. However, whether men lived in poorer or richer areas made no difference to their levels of generalised anxiety disorder (GAD). These are amongst the main findings of a major survey on how socio-economic factors affect mental health in the UK.

Generalised anxiety disorder is one of the most common mental health conditions in modern society, but little objective work has taken place to show the factors in society which can lead to the development of anxiety. Now, a new study of over 20,000 men and women in Norfolk, UK, has shown some of the factors which may contribute to this problem. Amongst the main findings are:

- Women living in more deprived areas in the UK were almost twice as likely to develop GAD as those living in areas that were not deprived, but this link between poverty and GAD does not exist in men.
- Men who perceive themselves to be in poor health are over 5 times more likely to develop anxiety than men who perceive their health to be good. However, women who believe they are in poor health are only 3 times more likely to develop GAD.
- In general anxiety decreased significantly with age, in both men and women.

According to lead researcher, Olivia Remes (Cambridge):

*“Women living in poor neighbourhoods were at an almost two times higher risk of developing GAD than those living in less deprived neighbourhoods. This link between deprivation and mental illness, however, does not appear to exist in men. This is intriguing, and further research is needed to shed light on this”.*

She continued:

*“Our study also showed that people with poor self-perceived health were at a high risk for developing GAD. Men who perceived their health to be poor were over five times more likely to develop GAD than those who did not, and this effect persisted even when serious medical conditions were accounted for. Similar, but less pronounced findings were observed in women. It is unclear yet why the link between self-perceived health and GAD should exist.*

*Poor self-perceived health can be a warning signal for future mental illness, however, additional research is needed to shed light on the exact mechanisms driving this association.*

*We have found these associations, now we need to see if we can find out what causes them”.*

The study was part of the much larger EPIC study\*, which is a huge European study looking at the relationship between chronic diseases and the way people live their lives. The Cambridge group followed up the health of 11,422 women and 8,878 men resident in Norfolk, UK. Using detailed health and lifestyle questionnaires, they were able to unpick some of the factors which contributed to poor health over the 15-year period of the study.

Commenting for the ECNP Communications Committee, Dr Iria Grande said :

*“Although it is common knowledge that gender differences exist, science has had difficulties in showing evidence in this field. This work has shed some light on how women and men deal differently with environmental factors, and it the effect this has on mental health. According to this research, feeling unhealthy seems to lead to clinical anxiety more in men than women whereas living in poor areas seems to lead to clinical anxiety only in women.”*

**ENDS**

### **Notes for Editors**

[Please mention the ECNP Congress in any stories which result from this press release.](#)

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\*The European Prospective Investigation into Cancer and Nutrition (EPIC) study is one of the largest cohort studies in the world, with more than half a million (521 000) participants recruited across 10 European countries and followed for almost 15 years <http://epic.iarc.fr/>

### ***The European College of Neuropsychopharmacology***

The ECNP is an independent scientific association dedicated to the science and treatment of disorders of the brain. It is the largest non-institutional supporter of applied and translational neuroscience research and education in Europe. Website: [www.ecnp.eu](http://www.ecnp.eu)

The annual ECNP Congress takes place from 29th August to 1st September in Amsterdam. It is Europe’s premier scientific meeting for disease-oriented brain research, annually attracting between 5,000 and 8,000 neuroscientists, psychiatrists, neurologists and psychologists from around the world. Congress website: <http://www.ecnp-congress.eu/>

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ABSTRACT

**P.4.a.007 Individual- and area-level risk factors of generalised anxiety disorder in a British community cohort: findings from the EPIC-Norfolk study**

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**Purpose of the study:** Generalised anxiety disorder (GAD) is one of the most common anxiety disorders in the general population. Affected individuals report clinically significant distress or impairment in social, occupational, or other important areas of functioning. Most cases develop before the age of 40 years, have a chronic course, and contribute to high primary care service use. The descriptive epidemiology of GAD has been well-characterized by US and UK studies [1,2]. The evidence on associated risk factors is insufficient and significant knowledge gaps remain. A number of individual-level risk factors have been associated with anxiety disorders, such as, socio-economic status, history of psychopathology, and health status; however, the influence of the environment is less clear [2]. The vast majority of studies have not been able to capture both individual- and area-level determinants to assess their dual effects, but both levels have been shown to be independently related to health [3]. Given the need for further research in this area, we aimed to study the association between individual- and area-level characteristics and the likelihood of developing GAD.

**Methods used:** This was a cross-sectional, population-based study capturing individual-level data on sociodemographics, medical diagnoses, self-perceived health, and DSM-IV psychiatric disorders using detailed health and lifestyle questionnaires. The Townsend deprivation index was used to derive information on area-level deprivation. A total of 11,422 women and 8,878 men over the age of 40 were recruited between 1996 and 1999 through general practice age-sex registers in Norfolk, UK. Associations between each risk factor and GAD were analysed using logistic regression.

**Summary of results containing real data and appropriate statistical assessments:** In total, 1.8% of men and 2.6% of women had past-year GAD. For every 10-year increase in age, anxiety decreased significantly for both men and women (OR=0.52 [0.42, 0.64] and OR=0.64 [0.53, 0.71], respectively). Individuals with poor self-perceived health were significantly more likely to have GAD compared to those reporting good self-perceived health (men: OR=5.57 [3.07, 10.10]; women: OR=3.19 [1.89, 5.38]), over and above prevalent disease. Men and women with depression were also more likely to have GAD than individuals without depression (men: OR=9.88 [7.03, 13.90]; women: OR= 5.77 [4.51, 7.38]). Finally, women living in deprived areas were almost two times more likely to present with GAD compared to women not living in deprived areas (OR=1.74 [1.31, 2.30]), and this was over and above individual-level socio-economic circumstances. This effect was not observed for men.

**Conclusions:** About a third of people who develop anxiety symptoms seek help for their condition within the first year of symptom onset; otherwise, at least 10 years may elapse until medical help-seeking is initiated—and this often occurs after other psychiatric disorders have developed. At this point it becomes very difficult to treat the primary disorder and co-morbidities [2]. To prevent the costs, disability, and impairment associated with GAD,

prevention and intervention efforts should focus on individuals with poor self-perceived health, depression, and living in deprived areas.

**References** [1] Kessler R.C., Keller M.B., Wittchen H.U., 2001. The epidemiology of generalized anxiety disorder. *Psychiatr Clin North Am* 24[1], 19–39. [2] Simpson H.B., Neria Y., Lewis-Fernandez R., Schneier F., 2010. *Anxiety disorders – theory, research and clinical perspectives*. Cambridge University Press. Cambridge, UK. [3] Pattyn E., Praag L.V., Verhaeghe M., Levecque K., Bracke P., 2011. The association between residential area characteristics and mental health outcomes among men and women in Belgium. *Arch Public Health*. 69[1]:3.