Gender and depression

The impact of gender on the symptomatology and diagnostic profile of depression and the clinical effects of antidepressant treatment

Malene Grubbe Hildebrandt, MSc

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Official opponents: Povl Munk-Jørgensen, Lars Vedel Kessing, and Kirsten Ohm Kyvik.

Correspondence to: Malene Grubbe Hildebrandt, Department of Psychiatry, Odense University Hospital, DK-5000 Odense C. E-mail: malenehdk@yahoo.com

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ABSTRACT

The aim of the present PhD dissertation was to elucidate the impact of gender on the symptomatology and diagnostic profile of depression and on the clinical effects of antidepressant treatment.

The study was performed at The University of Southern Denmark, Odense. The material comprised 2081 patients (1435 women, 646 men) with MDD from four subpopulations. The four subpopulations consist of: a group of hospitalized patients (n=352) previously participating in randomized controlled trials (RCTs) performed by the Danish multicentre organization Danish University Antidepressant Group (DUAG); a group of hospitalized patients (n=118) participating in a "Medical Technology Assessment" (MTA) project; a group of ambulant patients (n=578) from psychiatric and general practices, previously participating in RCTs; and a group of patients (n=1033) from general practice, in which all patients were diagnosed by general practitioners.

Diagnoses were made according to the American (DSM-III, DSM-III-R or DSM-IV) and the international (ICD-10) diagnostic criteria for depression. The Hamilton Depression Scale (HDS) and the Newcastle Scale (N1) were applied in subsamples.

In the analyses regarding clinical effects of antidepressant treatment, a 5-week treatment period was analysed. Clomipramine (150 mg/day) was reference treatment and for comparable treatments citalopram (40 mg/day), paroxetine (30 mg/day) and moclobemide (400 mg/day) were employed. Weekly measurements of clomipramine plasma concentration were obtained in 110 patients.

The gender ratio found in the four subpopulations varied from 2.0 to 3.4 (F:M). According to N1, a significantly higher proportion of men (80%) than women (66%) suffered from melancholic depression. No gender differences in the severity or symptomatology were found.

Both genders had significantly higher but similar remission rates (HDS<8) when treated with clomipramine than with comparable medication. Therapeutic effects did not depend on gender. Dropouts and side effects were equally distributed between men and women. The plasma concentration levels of clomipramine were significantly higher for female than for male patients. Other studies as well have found higher plasma concentration levels of TCAs in women than in men. The consequences of this gender difference in relation to clinical effects have not been adequately explored and the meaning of relation to clinical effects is a relevant topic for future research.