



Brief report

Duration of untreated depression influences clinical outcomes and disability



Lucio Ghio^{a,*}, Simona Gotelli^b, Alice Cervetti^a, Matteo Respino^a,
Werner Natta^a, Maurizio Marcenaro^a, Gianluca Serafini^a, Marco Vaggi^b,
Mario Amore^a, Martino Belvederi Murri^a

^a Department of Neuroscience, Ophthalmology and Genetics, Psychiatry Section, University of Genoa, Italy

^b Department of Mental Health, ASL3, Genoa, Italy

ARTICLE INFO

Article history:

Received 20 October 2014

Received in revised form

12 January 2015

Accepted 13 January 2015

Available online 21 January 2015

Keywords:

Depression

Untreated illness

Antidepressant

Prevention

Early intervention

Disability

ABSTRACT

Background: The duration of untreated depression (DUD) might have a substantial impact on the clinical outcomes; however, there are important knowledge gaps including the effects on disability and potential differences between first-episode and recurrent episodes of depression.

Methods: We recruited 121 outpatients with first episode and recurrent major depression, and conducted prospective clinical assessments over six months. Clinical outcomes included response to antidepressant therapy, remission and changes in disability.

Results: Patients with a DUD of six months or shorter were more frequently young, unemployed and had higher levels of physical illnesses than those with a longer DUD (all $p < 0.05$). A shorter DUD was associated with significantly higher odds of response at 12 weeks (adjusted odds ratio 2.8; 95% CI: 1.2–6.8) and remission at 24 weeks (4.1; 95% CI: 1.6–10.5) after adjusting for relevant confounders. Changes in disability ratings were analyzed with growth curve analysis and showed steeper declines among those with a shorter DUD. The associations of DUD on clinical outcomes were evident both in patients with first-episode and recurrent depression.

Limitations: Naturalistic design. Self-rated assessment of disability. Findings from subgroup analyses should be replicated in larger sample size.

Conclusions: A shorter duration of untreated depression is associated with more favorable outcomes for major depression, including depression-related disability. This association seems to work both at the first and recurrent episodes, which might have direct implications for both primary and secondary prevention.

© 2015 Elsevier B.V. All rights reserved.

1. Introduction

Delivering timely mental health care can influence the long-term outcomes of mental disorders. However, knowledge on this issue is still limited for depression (Ghio et al., 2014).

A seminal study showed that a longer period of time before starting antidepressant drug treatment was associated with a higher probability of persistence of depressive symptoms (Scott et al., 1992). Few studies reexamined this topic (Bukh et al., 2013; de Diego-Adelino et al., 2010; Furukawa et al., 2000; Gormley et al., 1999; Okuda et al., 2010); however, most confirmed the

importance of reducing treatment delays. A recent meta-analysis summarized the results from three studies, showing that a shorter duration of untreated depression (DUD) in the first episode was associated with a higher likelihood of response to antidepressant treatment (relative risk of 1.70) and remission from depression (relative risk of 1.65) (Ghio et al., 2014).

However, relevant questions remain regarding the role of the DUD. No study examined whether a shorter DUD is associated with improvements of disability: this would be relevant, given that depression is a major cause of disability worldwide (Ferrari et al., 2013). Also, it is unknown if the DUD impacts clinical outcomes just during the first episode or also later in the illness course (Bukh et al., 2013). In this regard, past research differentiated between the Duration of Untreated Illness (DUI), that is the period between the first episode and the start of treatment, and the Duration of Untreated Episode (DUE), that is between the onset of a recurrent episode and the restart of treatment, without maintenance

Abbreviations: DUD, duration of untreated depression; DUI, Duration of Untreated Illness; DUE, Duration of Untreated Episode; FED, first-episode depression; RED, recurrent episode of depression

* Corresponding author. Tel.: +39 105552978; fax: +39 105556716.

E-mail address: lu.ghio@libero.it (L. Ghio).

therapy (Ghio et al., 2014). To date, only one study examined the DUI and DUE simultaneously (de Diego-Adelino et al., 2010); the former, but not the latter, was associated with changes in clinical outcomes. However, patients were treated according to a clinical trial protocol, rather than naturalistically, therefore results might be less generalizable to the real-world clinical setting. Given these premises, we planned to assess the effect of the DUD on depression outcomes and disability.

2. Method

2.1. Participants

Eligible patients with a diagnosis of Major Depressive Disorder (MDD) were consecutively recruited from the Outpatient Unit of the Psychiatric Clinic of the University of Genoa and the Voltri Community Mental Health Center during a 12 months period.

Inclusion criteria were a diagnosis of unipolar MDD according to DSM-IV-TR criteria (American Psychiatric Association, 2000), a score of 18 or higher on the 17-item Hamilton depression rating scale (HAM-D) (Hamilton, 1980) and availability to sign an informed consent. We included both participants with first-episode depression (FED) and recurrent episode of depression (RED), that is, with at least one prior episode of depression before the index episode. Patients with RED had to be free from antidepressants since at least 12 months before the current episode. Other reasons for exclusion were other axis I disorders, concurrent psychotherapeutic interventions, pregnancy, lactation, dementia and other intellectual disabilities.

2.2. Procedure

Researchers collected socio-demographic and clinical data, including personal and familiar psychiatric history, previous antidepressant treatment, number of depressive episodes, medical history and number of current physical illnesses. Information on the DUD was collected at baseline using an ad-hoc questionnaire and additional information provided by informants. The DUD for the index episode was defined as the interval between the onset of the current episode and the start of the first adequate treatment, that is the DUI for those with FED and the DUE for those with RED (de Diego-Adelino et al., 2010).

Patients were treated naturalistically with antidepressant drugs following the recommendations of recent guidelines (NICE, 2010) and were reassessed after 12 and 24 weeks from baseline (± 1 week). Depressive symptomatology was evaluated using the HAM-D. Clinical outcomes were earlier response to treatment, defined as a reduction of at least 50% from the HAM-D-17 baseline score at 12 weeks, and final remission, defined as a score of 7 or less at 24 weeks. Depression-related disability was assessed with the Work and Social Adjustment Scale (WSAS) (Mundt et al., 2002).

2.3. Statistical analyses

Patients were subdivided according to the length of the DUD (≤ 6 months vs. > 6 months) and compared for socio-demographic and clinical features with Chi-square and *T*-tests. Survival analysis was used to estimate differences in the time-to-response and remission from baseline evaluation, using data from 12 and 24 weeks visits. Logistic regression models were conducted to evaluate the effect of DUD on depression outcomes, earlier response and final remission. Lastly, we used multilevel mixed growth curve analysis to examine the changes in disability scores over time nested within individuals (WSAS scores at baseline, 12 and 24 weeks). The linear and quadratic terms of time were tested as fixed parameters, along with the interaction terms

with group and other factors (Shek and Ma, 2011). Estimation of the parameters was done using the Restricted Maximum Likelihood Method and Unstructured Covariance model. Analyses were performed using SPSS version 15.0.

3. Results

The sample included 121 patients, treated with SSRIs (71.1%), SNRIs (27.3%) or agomelatine (1.7%). The majority had a DUD of 6 months or shorter ($n=79$, 65%). Table 1 reports the comparison of participants on the basis of the DUD: subjects with a shorter DUD were more frequently younger than 60, unemployed and more frequently physically ill (all $p < 0.05$).

3.1. Effect of DUD on clinical outcomes

Despite receiving less frequent increases of antidepressants dosage, individuals with a shorter DUD showed better outcomes. Subjects with a shorter DUD had higher odds of achieving earlier response (aOR=2.7; 95% CI: 1.1–6.8) and final remission (aOR=5.3; 95% CI: 1.9–14.8), even after adjusting for relevant confounders (see Table 1). In survival analyses on the whole sample, a shorter DUD predicted earlier response (15.2 weeks, 95% CI: 14.7–17.2 vs. 19.4 weeks, 95% CI: 17.6–21.2; log rank $\chi^2=18.4$, $df=1$, $p < 0.001$) and remission (18.7 weeks, 95% CI: 17.4–20.0 vs. 22.6 weeks, 95% CI: 21.4–23.8; log rank $\chi^2=22.0$, $df=1$, $p < 0.001$).

3.2. Depression-related disability

Those with a shorter DUD had lower WSAS scores at 12 and 24 weeks (see Table 1 and Fig. 1). In the growth curve model, disability was explained by a negative effect of time ($p=0.003$), by the interaction of DUD with time ($p=0.03$) and positively by the interaction of DUD with the quadratic term of time ($p=0.03$). This indicates that a shorter DUD was associated with more pronounced decreases of disability, with a steeper decline between baseline and 12 weeks than between 12 and 24 weeks. Gender, older age, unemployment, presence of previous episodes of depression and physical illnesses, type of antidepressant did not have significant effects on the course of disability. Instead, antidepressant dosage increase was associated with higher levels of disability at baseline ($p=0.03$) and with a slower decline of disability ($p=0.03$). The model including the DUD had higher fitness than those using only time as a predictor (2LL decrease=145; $df=25$; $p < 0.001$) or using all predictors except for the DUD (2LL decrease=21; $df=3$; $p < 0.001$). Changes in WSAS and HAM-D scores from baseline to 24 weeks correlated significantly ($r=0.66$, $p < 0.001$).

3.3. Effect of first vs. recurrent episode of depression

Being in the first episode of depression was associated with higher odds of earlier response (aOR=2.4, 95% CI: 1.1–5.5, $p=0.03$) but not of final remission (aOR=1.9, 95% CI: 0.8–4.7, $p=0.16$). Therefore, we performed exploratory analyses subdividing the sample on the basis of antecedents of depression (FED vs. RED).

Among FED ($n=57$), 41 subjects had a shorter DUD (72%). A shorter DUD was associated with higher odds of earlier response at trend level (aOR=4.0, 95% CI: 0.97–16.0, $p=0.06$), and with final remission (aOR=6.2, 95% CI: 1.5–26.2, $p=0.01$) after adjusting for relevant confounders. Also, a shorter DUD was associated with steeper decreases of WSAS scores at trend level (time \times group effect $p=0.056$).

Download English Version:

<https://daneshyari.com/en/article/6231961>

Download Persian Version:

<https://daneshyari.com/article/6231961>

[Daneshyari.com](https://daneshyari.com)