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**Abstract:** Background: Treatment preferences of patients suffering from depression may affect adherence and clinical outcomes. This study examines associations between patients' treatment preferences, their characteristics and illness representations of depression.

**Methods:** Illness representations of depression (IPQ-R), treatment acceptability and preferences were assessed in 88 newly diagnosed patients with first episode depression. Other measures recorded: gender, age, education level, income, psychiatric comorbidity, depressive symptomatology (PHQ-9), a family history of depression, and current treatment of depression. Multiple logistic regression was used to identify factors associated with a preference for psychotherapy.

**Results:** Psychotherapy was preferred by 41% of participants, while 31% favored antidepressants. Acceptability was strongly associated with preference. Patients preferring psychotherapy perceived that their depression has more serious consequences than those preferring medication and were more likely to attribute their depression to social causes than psychological or physical causes. Participants who preferred psychotherapy were more likely to be female, have a university degree and have a family history of depression.

**Limitations:** The cross-sectional design precludes causal interpretations.

**Conclusions:** Preferences vary according to gender, level of education, family history and illness representations. It may be important to provide accurate information on both treatments and discuss patients' preferences before prescribing treatment.

## **Treatment preferences in patients with first episode depression**

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## **1. Introduction**

In Canada, over one out of ten people (12%) will suffer from depression at one point in their lives (Patten et al., 2006). This mental disorder is characterized by a strong recurrence rate. During the first year following recovery, between 21% and 37% of patients experience a second episode of depression and this rate can reach 85% after 15 years (Hardeveld et al., 2010). Psychotherapy and antidepressants are the two main treatments for depression (CANMAT, 2009). In order to avoid relapses, people suffering from depression must properly adhere to their prescribed treatment. In the case of antidepressants, the recommended minimum duration of treatment is 6 to 12 months, yet 30% of patients stop taking their medication in the first 30 days and over 40% stop in the first three months (Olfson et al., 2006). As for psychotherapy, according to Canadian recommendations a minimum of 12 visits are needed, but only 60% of patients having begun psychotherapy receive this much treatment (Duhoux et al., 2012)

Under current guidelines, health professionals and, in particular, physicians need to take patient preferences into account in order to encourage adherence and effective treatment of depression (Trivedi et al., 2007; APA, 2000; NICE, 2009). Patients obtaining their preferred treatment (whether psychotherapy or pharmacotherapy) is associated with the best clinical results, particularly in terms of better remission rates but also in terms of a more significant reduction in depressive symptomatology (Clever et al., 2006; Gelhorn et al., 2011; Kocsis et al., 2009; Loh et al., 2007; Lin et al., 2005; Mergl et al., 2011). Persons suffering from depression often have very clear preferences (Churchill et al., 2000; Dwight-Johnson et al., 2000) and want to play an active role in treatment selection (Stacey et al., 2008; Arora and McHorney, 2000). While physicians generally

prefer antidepressants, patients often prefer psychotherapy (Van Schaik et al., 2004; Löwe et al., 2008; Khalsa et al., 2011; Churchill et al., 2000; Dwight-Johnson et al., 2000; Iacoviello et al., 2007; Mergl et al., 2011).

The rare studies that have examined the predictors of preferences in treatment of depression indicate that women are more likely than men to prefer psychotherapy (Churchill et al., 2000; Dwight-Johnson et al., 2000; Garcia et al., 2011; Givens et al., 2007; Khalsa et al., 2011), but few studies have examined the influence of education and income level (Morey et al., 2007). People who prefer antidepressants to psychotherapy tend to subscribe more to biomedical explanations of illness (Khalsa et al., 2011; Garcia et al., 2011), but representations concerning the illness's chronic nature, seriousness and consequences have not been associated with treatment preferences. Prior studies dealt with samples that were very heterogeneous in terms of treatment history. We know nothing of the preferences of individuals with a newly diagnosed first episode of depression when they are offered treatment for the first time. Primary care physicians rarely consider the treatment preferences of their depressed patients (Young et al., 2008). Better knowledge of the factors associated with the preferences expressed by patients could prove useful to physicians. It could help them tailor their discussions with patients to treatment preferences and provide appropriate information that supports shared decision making.

This study examines treatment preferences among individuals treated in primary care for a first episode of a major depression. It has two objectives: (1) to describe perceptions of psychotherapy and antidepressants among individuals with a newly

diagnosed first episode of depression; (2) to identify the main correlates of treatment preferences, including patient characteristics (sex, age, level of education, income and psychiatric comorbidity), illness representations and perceived social stigma.

## **2. Methods**

### *2.1. Sample*

The participants were recruited in three regions of Quebec, Canada (the Montreal, Outaouais and Capitale nationale regions) through advertisements in newspapers, posters in medical clinics and pharmacies, and information pamphlets distributed by primary care physicians and mental health caregivers. The study's inclusion criteria were: (1) being 18 years of age or older; (2) being English or French-speaking; (3) having a first episode depression as diagnosed by a physician in the previous eight weeks; (4) having received a medical prescription for an antidepressant or psychotherapy; (5) having a PHQ-9 result (Spitzer et al., 1999) equal to or greater than 10 on entry into the study. Individuals with psychotic disorders and women who were pregnant or who had given birth in the previous six months were excluded. A total of 480 persons contacted the research coordinator to participate to the study, 337 were excluded for not meeting our inclusion criteria, and 55 refused to participate after being informed of the participation expected from them. Participants were recruited from September 2010 to April 2012. A financial compensation of \$20 was offered for completing the questionnaire. A total of 88 persons participated in the study (61% participation rate). All patients gave informed written consent and the study was approved by the Ethics Board of the Research Centre of the University of Montreal Hospital Centre (CRCHUM).

## 2.2. Measures

### 2.2.1. Treatment acceptability and preferences

We adapted the Treatment Acceptability and Preferences Measure (Sidani et al., 2009) – a generic measure that assesses the acceptability of different treatments – to depression. Participants were provided with information on psychotherapy and antidepressant treatment in clearly labeled sections: treatment name, description, benefits, and disadvantages. Perceptions of treatment acceptability were measured using specific attributes: (a) *effectiveness* in treating depression; (b) *appropriateness*, i.e. the treatment seems to be a logical way to address depression; (c) *suitability* to the individual's life style; (d) *ease* of adherence; and (e) *convenience*, i.e. willingness to apply and adhere to the treatment. A total score was calculated for each treatment by averaging the scores on all the questions. Final scores could vary from 1 to 5, with higher scores indicating higher acceptability. The two scales (psychotherapy and antidepressants) demonstrated good internal consistency (Cronbach's alphas: .77 and .91, respectively). For treatment with antidepressants, a supplementary question examined perceptions of the severity of side effects. Preference was measured by asking "Do you prefer one of these two types of treatment?" The respondent could answer yes or no. If the answer was yes, the respondent needed to specify whether he or she preferred antidepressants or psychotherapy.

### 2.2.2. Illness representations

The Illness Perceptions Questionnaire-Revised (IPQ-R; Moss-Morris et al., 2002) was used to assess cognitive and emotional representations of depression. We replaced the word “illness” with “depression” throughout the questionnaire, following a recommendation by Moss-Morris et al. (2002). The first part of the IPQ-R, which asks participants to rate a number of symptoms perceived as part of the illness, was not administered. Seven subscales from the second part were used: *acute/chronic timeline*, depression will last a long time (6 items); *cyclical timeline*, symptoms come and go in an unpredictable way (4 items); *consequences*, depression will have serious consequences in various aspects of life (6 items); *personal control*, power to control depression is in the hands of the depressed person (6 items); *treatment control*, medical treatment is effective in controlling depression (5 items); *illness coherence*, depression is understandable (5 items); and *emotional representations*, depression affects emotions negatively (6 items). The internal consistencies of the subscales were satisfactory (Cronbach’s alphas: .51-.84). The third part of the IPQ-R assesses causal attributions with 27 items. As recommended by Moss-Morris et al. (2002), we performed a factor analysis in order to identify groups of causal belief. Three subscales with 18 items were created: *psychological attributions*, such as my personality or my attitude (7 items); *physical attributions*, like hereditary or medical illness (6 items); and *social attributions*, such as family problems or the loss of a significant relationship (5 items). The subscales proved sufficiently reliable (Cronbach’s alphas: .62-.75).

### 2.2.3. Patient characteristics

Data were collected on sex, age, ethnicity, level of education, employment status and family income. Family income was compared to the number of persons in the household in order to determine if each participant was above or below the poverty line for his or her area. Psychiatric comorbidity was examined for anxiety disorder (with one item of the Functional Comorbidity Index; Groll et al., 2005) and for substance abuse or dependence disorder (with the MINI; Lecrubier et al., 1998). Participants were asked if they were taking an antidepressant at the time of the interview and if they were currently in psychotherapy. Current or past depression in the family was also investigated.

### *2.3. Statistical analysis*

As stated in section 2.2.2, a factor analysis was performed on data from the third part of the IPQ-R. The Kaiser-Meyer-Olkin measure of sampling adequacy was used to assess the proportion of variance among the variables that might be common variance. A value of 0.64 was obtained. The result from Bartlett's test of sphericity (that the correlation matrix is an identity matrix) was highly significant ( $p < 0.00001$ ). Principal axis factoring was used as the extraction method. The three retained subscales accounted for 40% of the total variance. An orthogonal rotation was performed using the varimax approach.

Groups preferring psychotherapy or antidepressants were compared using chi-square tests for categorical variables and Student t-tests for quantitative variables. Whenever necessary, Satterhwaite's correction was used to take into account the heteroscedasticity of variances. All the tests were two-sided and the significance level was set at 0.05. Because of the multicollinearity among the variables studied, results from

these univariate analyses must be interpreted with care. With sample sizes of 27 and 36, a two-group  $X^2$  test will have an 80% power to detect an odds ratio of 4.5, and a two-group t-test will have an 80% power to detect a standardized effect size of 0.725 when using a 0.05 two-sided significance level.

A multivariate approach was used to identify factors associated with treatment preferences, based on a multiple logistic regression. A backward stepwise procedure was applied to identify a set of predictors with an inclusion significance level of 0.050 and an exclusion significance level of 0.051. The goodness of fit of the final model was evaluated with the Hosmer and Lemeshow statistic. Diagnostic statistics such as leverages, studentized deleted residuals and Cook's distances were obtained to identify subjects who may have unduly influenced the model. Besides the well-known approach for a normally distributed factor (Hsieh, 1989), to our knowledge no approach has been developed to determine sample size and/or power for a multiple logistic regression containing only dichotomous variables. All statistical analyses were performed using SPSS 20, SPSS Inc., Chicago, USA.

### **3. Results**

#### *3.1. Sample characteristics*

The sample included 47 men and 41 women with an average age of 42 (SD = 12.2). Nearly 55% of participants did not have a university degree, and 40% were below the poverty line. The PHQ-9 mean score of 15.9 (SD = 5.3) indicates a depression of moderate severity, for which both antidepressant and psychotherapy are recommended. Almost all (91%) of the participants were taking antidepressants, while only 31%

preferred this kind of treatment. More detailed information on participant's characteristics can be found in Table 1.

Insert Table 1 here

### *3.2. Treatment acceptability*

As show in Table 2, there are many similarities in the participants' evaluations of the acceptability of treatment with psychotherapy and antidepressants. The only difference concerns the ease with which all the requirements of the treatment can be met; adherence to antidepressants is evaluated as easier than adherence to psychotherapy. However, participants evaluated the side effects of antidepressants as "very severe."

Insert Table 2 here

### *3.3. Factors associated with treatment preferences*

Univariate analyses were performed on the 63 participants who reported a preference for one treatment in order to identify the factors associated with treatment preference (see Table 3). The Chi-square tests indicated that women, participants with a university degree and participants with a family history of depression are more likely to prefer psychotherapy. Participants preferring psychotherapy were less likely to have received such treatment. With regard to illness representations, the t-test revealed that participants who preferred psychotherapy feel that depression has more serious consequences on their lives. Patients who preferred psychotherapy more strongly

endorsed social attributions for their depression than patients who preferred antidepressants. Treatment acceptability is associated with preference: participants who preferred psychotherapy evaluated its acceptability more favorably. The same was true of the participants who preferred antidepressants.

Insert Table 3 here

The logistic regression reported in Table 4 indicates that, in addition to current exposure to psychotherapy, female gender, university level of education and family history of depression remain significant correlates of a preference for psychotherapy. Treatment acceptability was not included in the regression model because of its high correlation with preference ( $r = .68$ ), which creates a problem of collinearity. Table 5 presents probabilities of preferring psychotherapy as estimated from the multiple logistic regression model when controlling for current treatment. For example, if we compare lowest and highest probabilities, we see that the probability that men without a family history of depression and no university degree will prefer psychotherapy is only 10.8%. In contrast, the probability that a woman with a family history of depression and a university degree will prefer psychotherapy is 98.6%.

Insert Table 4 and Table 5 here

#### **4. Discussion**

This is the first study to have examined the treatment preferences of persons with newly diagnosed first episode depression. Another unique contribution of this study lies in the fact that it relates treatment preferences to various characteristics of the participants and their representations of the illness. Our results suggest that most persons with newly diagnosed first episode depression prefer one of the two recognized treatments over the other. This preference is influenced by several factors, including the person's gender, level of education, and family history. It is also strongly influenced by the patient's personal evaluation of certain characteristics of the treatment, i.e. its effectiveness, appropriateness, suitability, ease of adherence and convenience.

Psychotherapy is the preferred mode of treatment among individuals with a newly diagnosed first episode of depression, despite the fact that it is considered more demanding than antidepressants. Our study therefore confirms prior observations in samples of persons who were not clinically depressed or not formally diagnosed (Van Schaik et al., 2004; Löwe et al., 2008; Khalsa et al., 2011; Churchill et al., 2000; Dwight-Johnson et al., 2000; Iacoviello et al., 2007; Mergl et al., 2011). Antidepressants are perceived by persons in a first episode of depression as having serious side effects, and this perception may help make antidepressants less preferred as a treatment. Physicians do not provide their patients with much information when they prescribe antidepressants (Young et al., 2006). However, many patients could be reassured if they received education on the side effects of antidepressants, combined with an opportunity to modify the treatment if it proves too toxic. This approach could change their preferences. When physicians provide information to their patients on antidepressant treatment (minimum required duration, expected side effects, the need to continue treatment even if they start

to feel better), patients are better informed and more likely to demonstrate better adherence to treatment (Brown et al., 2007; Bull et al., 2002; Bultman and Svarstad, 2000; Lin et al., 1995).

Our results also suggest that individuals who prefer psychotherapy are at a disadvantage compared to those who prefer antidepressants. Only 50% of the participants who preferred psychotherapy received it, compared to 96% of the persons who preferred medication. Many factors may help explain this situation. First, it is more difficult to gain access to psychotherapy than it is to antidepressants, which are available at a modest cost in all pharmacies. Significant barriers can adversely affect the accessibility of psychotherapy, including its cost, time constraints, lack of knowledge about how to go about consulting with a recognized psychotherapist, the difficulty finding such a resource person nearby, waiting lists for consultations, etc. (Mohr et al., 2006; Mohr et al., 2010). It is also possible that physicians do not recommend psychotherapy to patients suffering from depression or do not refer them to professionals deemed able to provide psychotherapy, such as psychologists or social workers (Piek et al., 2011; Richards et al., 2004; Wang et al., 2003). But psychotherapy is effective in primary care, particularly when patients are referred by their family physicians (Cuijpers et al., 2009). Neighbourhood medical clinics rarely have psychologists on-site, easily accessible to patients. Physicians would undoubtedly be more inclined to refer their patients to psychologists if they are regularly in contact with psychologists, such as by working in the same clinic (Craven and Bland, 2006).

Our results indicate that three out of four women prefer psychotherapy to antidepressants, while men are more evenly split between the two types of treatment.

Previous studies have shown that being female is positively associated with a preference for psychotherapy (Churchill et al., 2000; Dwight-Johnson et al., 2000). Since women are more likely to talk about their emotions and distress (Komiya et al., 2000; O'Loughlin et al., 2011), it is possible that the ease with which they express feelings may explain part of this preference. However, even though men's reticence to ask for professional psychological assistance when they are experiencing emotional distress has been well documented (Berger et al., 2005; MacKenzie et al., 2006; Mojtabai et al., 2006; Oliffe et al., 2012; Johnson et al., 2012; Pedersen and Vogel, 2007), it is surprising to observe that close to half of the men in our sample (43%) preferred psychotherapy. Our results therefore qualify the literature on men's lack of interest in psychotherapy. It is important that physicians, when making diagnoses of depression, take the time to confirm with their male patients whether they have a preference for psychotherapy and, if they do, to propose resources that could help them gain access to this type of treatment. Physicians are less likely to refer men to psychotherapy than they are to refer women (Alvidrez and Areal, 2002).

Our study has revealed an association between level of education and treatment preference. Individuals with a university degree are more likely to prefer psychotherapy than those with less education. There are several potential explanations for this finding. Psychotherapy requires talking about your suffering, emotions and problems. Patients must be able to express themselves well, and be ready to spend a considerable amount of time and energy treating their depression. These two characteristics may be more often found in people with more formal education. Furthermore, a university degree usually

leads to a higher salary, which removes or at least considerably reduces the financial obstacle to receiving psychotherapy.

According to our study's results, someone with a family member who has already suffered from depression is more likely to prefer psychotherapy. It is possible that such individuals consider talking about their depression less of a taboo; family experience may have reduced the stigma surrounding the illness (Wang and Lai, 2008). They may also attribute their depression to events in their childhood that they would like to explore in psychotherapy.

Representations of depression are also associated with treatment preferences. Our results indicate that persons who prefer psychotherapy believe that their depression has more serious consequences on their lives than those who prefer antidepressants. These individuals are more inclined to attribute their depression to social causes, such as marital, family or interpersonal problems. These representations may make a patient more motivated to undertake psychotherapy and to invest the time, money and energy required to learn different strategies for solving problems in their personal relationships and mitigate the negative impacts of their depression. Antidepressants act on depressive symptomatology but not on the individual's ability to maintain harmonious relationships. Knowledge of patients' representations of illness may help physicians recommend treatment that their patients will find more appropriate and will not abandon prematurely. Shared decision making needs to be encouraged, due to its positive impact on adherence to treatment and clinical results (Kocsis et al., 2009; Clever et al., 2006; Loh et al., 2007; Lin et al., 2005; Mergl et al., 2011).

Our study has some limitations. First, the cross-sectional design prevents us from making causal interpretations. Our sample was small, and the percentage of participants with a university degree was higher than that found in population-based surveys on persons suffering from depression. This suggests that caution should be exercised in interpreting the results. Future studies of larger samples are required in order to confirm the associations we have found between gender, level of education, a family history of depression and representations of the illness.

This study has many implications for practice. First, once physicians have arrived at a diagnosis of depression, they should take the time to inform the patient of the two potential forms of treatment and ask which they prefer. Asking questions on representations of the illness and whether there is a family history of depression may help the physician identify, with the patient, the most appropriate treatment. The physician could also correct any misconceptions about antidepressants, such as their side effects, which are perceived to be very serious. Since psychotherapy is the treatment most often preferred by persons suffering from depression, physicians should make every effort to discuss this treatment option with patients presenting mild to moderate symptoms. Mechanisms should also be in place for making referrals to psychotherapy.

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Table 1. Description of participants (n = 88)

Characteristics	n (%)
Gender	
Men	47 (53.4)
Women	41 (46.6)
Age	
18 to 24 years	9 (10.2)
25 to 35 years	18 (20.5)
36 to 45 years	21 (23.9)
46 to 59 years	32 (36.4)
60 years or older	8 (9.1)
Educational level	
< University	48 (54.5)
University	40 (45.5)
Employment status	
Employed (full time, part time or on sick leave)	58 (65.9)
Unemployed	30 (34.1)
Income <sup>a</sup>	
Above poverty line	52 (59.8)
Below poverty line	35 (40.2)
Ethnic background	
Canadian	68 (77.3)
Other	20 (22.7)
Family history of depression <sup>b</sup>	
Yes	55 (64.7)
No	30 (35.3)
Psychiatric comorbidity	
Yes	61 (69.3)
No	27 (30.7)
Current treatment	
Antidepressants only	50 (56.8)
Psychotherapy only	2 (2.3)
Both treatments	30 (34.1)
None	6 (6.8)
Treatment preferences	
Antidepressants	27 (30.7)
Psychotherapy	36 (40.9)
None	25 (28.4)

<sup>a</sup>n=87 ; <sup>b</sup>n=85

Table 2. Treatment acceptability of antidepressants and psychotherapy

Characteristics ( <i>n</i> =88)	Antidepressants	Psychotherapy	p value
	<i>M (SD)</i>	<i>M (SD)</i>	
Effectiveness	2.9 (1.0)	3.1 (1.2)	.259
Appropriateness	3.4 (1.0)	3.5 (1.1)	.446
Suitability	3.2 (0.9)	3.2 (1.3)	.941
Severity of side effects	3.8 (1.0)	-	
Ease of adherence	3.3 (1.1)	2.8 (1.2)	.002
Convenience	3.7 (1.1)	3.5 (1.3)	.237
Total	3.4 (0.6)	3.2 (1.0)	.227

Table 3. Factors associated with treatment preferences

Variables ( <i>n</i> = 63)	Preference for antidepressants ( <i>n</i> = 27)	Preference for psychotherapy ( <i>n</i> = 36)	p value
	n (%)	n (%)	
Gender			
Women	7 (25.0)	21 (75.0)	.010
Men	20 (57.1)	15 (42.9)	
Educational level			
< University	20 (55.6)	16 (44.4)	.019
University	7 (25.9)	20 (74.1)	
Employment status			
Employed	14 (36.8)	24 (63.2)	.234
Unemployed	13 (52.0)	12 (48.0)	
Income <sup>a</sup>			
Below poverty line	10 (37.0)	17 (63.0)	.364
Above poverty line	17 (48.6)	18 (51.4)	
Ethnic background			
Canadian	23 (47.9)	25 (52.1)	.147
Other	4 (26.7)	11 (73.3)	
Family member with depression (current or past) <sup>b</sup>			
Yes	13 (34.2)	25 (65.8)	.042
No	14 (60.9)	9 (39.1)	
Psychiatric comorbidity			
Yes	19 (43.2)	25 (56.8)	.937
No	8 (42.1)	11 (57.9)	
Current preferred treatment			
Yes	26 (59.1)	18 (40.9)	.000
No	1 (5.3)	18 (94.7)	
Current antidepressant treatment			
Yes	26 (46.4)	30 (53.6)	.105
No	1 (14.3)	6 (85.7)	
Current psychotherapy			
Yes	3 (14.3)	18 (85.7)	.001
No	24 (57.1)	18 (42.9)	
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	
Age (years)	45.6 (12.8)	41.2 (12.3)	.176
Depression severity (PHQ-9)	14.8 (5.2)	16.7 (5.5)	.180
Illness representations			
Timeline: acute/chronic	2.7 (1.0)	2.7 (0.6)	.725

Table 3. Factors associated with treatment preferences (continued)

Variables	Preference for antidepressants (n = 27) M (SD)	Preference for psychotherapy (n = 36) M (SD)	p value
Consequences	3.5 (0.7)	3.9 (0.6)	.019
Personal control	3.8 (0.6)	3.8 (0.7)	.971
Treatment control	3.9 (0.7)	3.8 (0.7)	.537
Illness coherence	3.5 (0.9)	3.6 (1.0)	.456
Timeline: cyclical	2.9 (0.9)	3.4 (1.0)	.077
Emotional representations	3.6 (0.8)	3.9 (0.6)	.193
Depression attributions			
Physical	2.1 (0.7)	2.0 (0.9)	.594
Psychological	3.4 (0.7)	3.6 (0.9)	.382
Social	2.6 (0.9)	3.1 (0.9)	.049
Treatment acceptability			
Antidepressants	3.6 (0.6)	3.1 (0.7)	.006
Psychotherapy	2.3 (0.7)	3.8 (0.8)	.000

<sup>a</sup>n = 62 ; <sup>b</sup>n = 61

Table 4. Predictors of psychotherapy preference among 61 participants newly diagnosed with depression, by multiple logistic regression analysis

Covariate	<i>B</i>	S.E.	Wald	df	p	OR	95% CI
Female	2.28	0.83	7.57	1	.006	9.8	1.9-50.0
University educational level	2.03	0.78	6.73	1	.009	7.6	1.6-35.4
Family history of depression	2.06	0.80	6.57	1	.010	7.8	1.6-37.7
Current psychotherapy	2.85	0.94	9.20	1	.002	17.3	2.7-109.3

Table 5. Probabilities of preferring psychotherapy as estimated from the multiple logistic regression model when controlling for current treatment

		Education			
		< University		University	
		Family history		Family history	
		No	Yes	No	Yes
Gender	Female	0.543	0.903	0.900	0.986
	Male	0.108	0.486	0.480	0.878

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