

Presence of suicidality as a prognostic indicator

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ABSTRACT

Background: Suicidal symptoms in depression are often thought to predict a higher severity of illness and a worse prognosis.

Aims: To determine if suicidal ideation at the time of treatment for major depression can predict response to antidepressant medication in primary care.

Settings and Design: A retrospective analysis of subjects receiving anti-depressant drugs in a primary care setting

Methods and Material: Nine depressed patients (14%) who acknowledged suicidality on the PHQ-9 depression scale were followed up for and compared to a group of 54 (86%) depressed patients (controls) who did not have suicidal thoughts for four months. All were given treatment with antidepressants and followed with a disease management protocol where the PHQ-9 was used as a systematic outcome measure.

Statistical Analysis: Descriptive measures and t-tests were utilized to show statistical significance.

Results: There were no statistical differences in remission from depressive symptoms based on the PHQ-9 scale after antidepressant treatment, between patients with suicidal thoughts (56%) and those without (44%).

Conclusion: The presence of suicidality as a depressive symptom did not predict poorer clinical outcome when treating depression in the primary care setting in the patients studied.

KEY WORDS: Depression, suicide, prognosis, antidepressants

Major depressive disorder (MDD) is one of the most common disorders seen in primary care. Of all the patients seen by a primary care provider, 5 to 10% have major depression.¹ It affects 5 to 12% of men and 10 to 25% women in their lifetime,^{2,3} and nearly 75% of patients seeking help for depression go to a primary care physician (PCP).

The association between demographics, psychiatric disorders and suicide is well known, and affective disorders appear to be the ones most commonly associated with suicide (45%-70%).^{4,5,6} However, there have been no MEDLINE-indexed studies that look solely at suicidal ideation as a prognostic factor for predicting response to treatment in depression in the primary care setting. It is often clinically assumed that suicidal thoughts equal a worse level of depression and it is usually thought maybe that treatment effectiveness or outcome may be worse for these patients, despite little scientific data in this area. There are a number of studies that look at factors that can predict poor response to treatment in depression such as overall symptom severity, psychiatric co-morbidity,^{7,8,9,10} life stressors^{11,12} medical co-morbidity,^{13,14} social supports,¹⁵ level of functional disability,¹⁶ and personality pathology.^{17,18} None though have focused on the single symptom of suicidal thinking. Hence we carried out a study to determine whether the presence of suicidal ideation in depressed patients seeking the attention of a

primary care physician could predict a poorer treatment outcome in depression.

Materials and Methods

The study was retrospective and analysed patient records, which was approved by the institutional review board. The records of consecutive subjects, who were initially diagnosed as having major depressive disorder by their primary care physician, over a two-year period, were reviewed and evaluated.

Upon initial diagnosis by a primary care physician, a depression management protocol is initiated for each patient. The diagnosing physician alerts a nurse care manager, who then becomes the patient's case manager. The nurse then conducts a telephonic interview with the patient so as to obtain a brief history: DSM-IV depression symptom screening, PHQ-9 depression rating scale, and a functional capacity rating scale rating would also be performed. The PHQ-9 is a scale where patients respond to anchor pointed questions which address typical major depressive disorder symptoms as per DSM-IV and allows a score based on the total number of depressive symptoms noted over previous two-week period.¹⁹ There is also a subscale that identifies severity of each symptom to determine if the symptom in question can be scored as significant or as mild and transient. Part of this battery of self-report questions also includes a direct question about the presence and severity of suicidal thoughts and also about depression chronicity to see if the symptoms have been present more

often than not over the previous two years. For depression severity, a score of 5, 10, 15, 20 reflects mild, moderate, moderately severe and severe depression, respectively.

Clinical interviewing also attempts to address other psychiatric co-morbidity. Subjects with psychiatric co-morbidity were excluded from the analysis. However, given the retrospective nature of the study, other suicide demographics were not captured (i.e. family history, history of violence or previous attempts, etc.).

If the nurse case manager confirms major depression, then the primary care physician starts an antidepressant. As a routine practice the primary physician is allowed to choose the antidepressant and also decide on combination pharmacotherapy or psychotherapy as required. This was a naturalistic study of non-recruited depressed patients in a primary care office. A week after drug initiation, the primary care physician and consultant psychiatrist discuss each case via a teleconference call for confirming the diagnosis and for confirming the appropriateness of the treatment regimen employed. At Week 4, 8, 16, follow-up consulting calls are made to the psychiatrist. A team approach is practised through active liaison between the nurse case manager and the primary care physician. Routine assessments are made at these intervals also with each patient with the scales noted above. This way, clinical assessments as to depressive symptomatology are compared with systematic patient report outcome measures. Options to combine antidepressants together, or to start psychotherapy occur in this liaison model as well. Given the fact that this population was being treated in the primary care setting, very little concomitant psychotropic use was noted and depression was often felt to be of a moderate level. This cohort allows for a systematic approach to treating depression and also for evaluating treatment outcomes.

The authors hypothesized that (1) the presence of suicidal symptomatology would be predictive of poor response to depression treatment and that (2) all novel FDA approved antidepressant mono-therapies would be equally effective in treating depression regardless of

the presence or absence of suicidality. The authors evaluated 'response' to treatment versus 'remission' from depression. Response was defined as presence of residual DSM-IV symptoms four or less in number, a decrease in PHQ-9 score value of 50% from baseline and a decrease in functional impairment by one level (e.g. extreme difficulty at baseline to very difficult at any follow-up). Remission was defined as the presence of DSM-IV symptoms to two or less in number, a decrease in PHQ-9 score value of 70% or more from baseline and decrease in functional impairment by two or more levels (e.g. very difficult at baseline and none at follow-up).

Statistical Analysis

Descriptive measures and t-tests were used to differentiate between change in PHQ-9 and functional capacity in a within subjects' design where change from baseline (time = 0) to study exit (time = 4 months) was analysed for each subject to see if a statistically significant change occurred in depressive symptoms after four months of treatment.

Results

Records of 63 consecutive subjects (47 women and 16 men) satisfying the inclusion criteria were analysed. The baseline characteristics of the two groups are depicted in Table 1. Twenty-nine patients were 50 years of age or less. Sixteen per cent of the subjects were on two antidepressants and 41% were receiving psychotherapy. Sixty-five per cent reported chronic symptoms. Chronic depression was not causally related to suicidality as a symptom (p = 1.0). As shown in Table 1, there was no significant difference between the suicidal (n=9) and non-suicidal groups (n=54) in terms of response (p= 1.000) or remission rates (p= 0.466) after four months of therapy, regardless of the antidepressant medication used or employment or otherwise of psychotherapy. The overall response to treatment was 43-80% (x/ =46.6) and remission was achieved

Table 1: Suicidality, Response and Remission Among Depressed Patients

	Number of Symptoms Change				PHQ-9 Score Change				Functional Capacity Change			
	Response		Remission		Response		Remission		Response		Remission	
	N (%)	p-value	N (%)	p-value	N (%)	p-value	N (%)	p-value	N (%)	p-value	N (%)	p-value
Age- split at median												
< 51 (n=29)	14 (48)	0.040	11 (38)	0.155	12 (41)	0.106	8 (28)	0.371	11 (38)	0.098	4 (14)	0.137
>= 51 (n=34)	25 (74)		19 (56)		21 (62)		13 (38)		20 (59)		10 (29)	
Gender												
Male (n=16)	10 (63)	0.955	7 (44)	0.720	9 (56)	0.720	5 (31)	0.838	8 (50)	0.941	3 (19)	1.000
Female (n=47)	29 (62)		23 (49)		24 (51)		16 (34)		23 (49)		11 (23)	
Suicidal Thought Present												
Yes (n=9)	7 (78)	0.462	5 (56)	0.725	5 (56)	1.000	4 (44)	0.466	4 (44)	1.000	3 (33)	0.403
No (n=54)	32 (59)		25 (46)		28 (52)		17 (31)		27 (50)		11 (20)	
Medication Used												
Celexa (n=17)	13 (76)	0.230	11 (65)	0.174	12 (71)	0.091	8 (47)	0.633	11 (65)	0.065	5 (29)	0.553
Paxil (n=14)	6 (43)		4 (29)		5 (36)		3 (21)		8 (57)		3 (21)	
Zoloft (n=11)	5 (45)		4 (36)		4 (36)		3 (27)		3 (27)		1 (9)	
Effexor (n=5)	4 (80)		1 (20)		1 (20)		1 (20)		0 (0)		0 (0)	
Polypharmacy (n=10)	7 (70)		6 (60)		7 (70)		3 (30)		5 (50)		3 (30)	
Medication (n=37)	25 (68)	0.270	19 (51)	0.479	22 (59)	0.180	13 (35)	0.717	20 (54)	0.359	10 (27)	0.274
Alone												
Medication plus (n=26)	14 (54)		11 (42)		11 (42)		8 (31)		11 (42)		4 (15)	
psychotherapy												

for 20-65% ($x=29.0\%$) of patients depending upon the medication(s) used. No single antidepressant was found to be more effective in treating depression to a response ($p=0.091$) or remission ($p=0.633$) than other agents. Combining antidepressants together did not improve response or remission rates ($p=0.091$ and 0.633 , respectively) at four months of initiation of therapy. The addition of psychotherapy also, did not allow for a better response ($p=0.180$) or remission ($p=0.717$) rate. Dysthymia, or chronic depression of two or more years, predicted greater treatment response in two out of four measures ($p=0.031$ to 0.312).

Discussion

In this study, moderately depressed patients with pre-treatment suicidal thoughts responded and remitted equally well to treatment, and suicidal ideation was not found to be a poor prognostic indicator of treatment outcome after four months of systematic treatment. The assumption that suicidal ideation predicts a more difficult-to-treat depressive episode was unfounded.

This study was naturalistic, yet provided a controlled delivery system of care to moderately depressed patients. All patients received the same level of care and opportunity for treatment. The authors believe that this type of patient is the average depressed patient and possibly the most common type encountered in primary medical care settings.

Limitations include the following: retrospective design and non-matching of subjects in the two groups. In addition, the sample size studied was small. These factors would increase the risk of sample bias. It was also difficult to ascertain via database methods whether or not other previous history of suicide risk factors were present. However, subjects in both the groups reported similar rates for chronicity of major depressive episodes. It would be very useful if future research could replicate these findings in a matched prospective study in a large group of patients with depression. The study shows that the presence of suicidal symptoms does not, in any way, influence the response or remission rates in patients with depression. This finding would help these patients understand

that they have as much chance of responding to therapy as those without suicidal symptoms. It would also help primary care physicians expect the same results and prognosis as obtained in or seen with those without suicidality.

The authors hope that this naturalistic modality, while not as well controlled as a formal clinical trial, may better represent the depression management and outcomes typically seen in the real world by frontline providers.

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Expert's Comments

Presence of suicidal ideation as a prognostic indicator

Depression is one of the most common mental disorders seen in primary care settings.¹ Major depression, a chronic and recurrent illness that is associated with considerable mortality and morbidity² continues to pose challenges for early detec-

tion and appropriate management. The enormity of the problem could be understood by the assessment provided by the World Health Organization Global Burden of Disease Study, which estimated that in terms of magnitude of suffering, de-

pression would rank second only to ischaemic heart disease by the year 2020.³ Major depression is a significant risk factor for suicide and a common psychiatric diagnosis in patients who contemplate suicide. Over 50% of those who die by committing suicide suffer from a mood disorder including depression.⁴ Even though major depression remains under-diagnosed and under-treated, there has been a progressive increase in the utilization of antidepressants,^{5,6} particularly the selective serotonin reuptake inhibitors (SSRIs). This issue of the journal features an article by the Malhotra et al⁷ who conducted a naturalistic study to determine the prognostic significance of suicidal ideation in primary care patients receiving antidepressants.⁷ The routine clinical care included the use of psychotherapy in some patients. Contrary to their hypothesis, the authors found that at the end of four-month therapy, the response and remission rates were similar in patients with suicidal ideation and those without such ideation. In addition, the response to treatment did not vary with the type of antidepressant medication used.

Notwithstanding the methodological shortcomings usually associated with a retrospective, open trial, this study provides useful clinical information. An important finding is that antidepressants are safe and effective in the treatment of moderately severe depression with current suicidal ideation. This is a significant finding in the light of the view expressed by some that the use of SSRIs might induce suicidality in some patients.^{8,9}

There are, however, some caveats that should be considered while interpreting the results reported in the study. For example, personality features such as social desirability rather than the illness variables might mediate the reporting of suicidal

ideation. In this study, a single variable (admission of suicidal ideation) was used as the basis for establishing dichotomous illness groups. Such a procedure is not uncommon in psychiatric research. But we are less aware of it being done when the difference between groups is found to be statistically significant. The present finding of no difference can be taken as a reminder that a vivid illness feature such as suicidal ideation does not naturally mean that such patients have an illness that is qualitatively different from those who do not endorse suicidality.

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