A Survey on the Impact of Being Depressed on the Professional Status and Mental Health Care of Physicians

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Context: Recent studies have addressed the need to better understand the nature and risk of depression and suicide in physicians.

Objective: To assess the prevalence of depressive symptoms in a sample of practicing physicians, their perceptions of the impact of depression on their work lives, and their perceptions of the impact of being a physician on their pursuit of mental health care.

Design: An anonymous survey was mailed in April 2005 that included the Patient Health Questionnaire depression module (PHQ-9) and other Likert-style questions.

Participants: Five thousand randomly selected practicing physicians in Michigan, from whom 1154 usable responses were received (23% response rate).

Main Outcome Measures: The prevalence of depressive symptoms and the perceptions by respondents of the impact of depression on work roles and on their approach to seeking mental health care.

Results: Moderate to severe depression scores were reported by 130 physicians (11.3%). Roughly one quarter of respondents reported knowing a physician whose professional standing had been compromised by being depressed. Physicians reporting moderate to severe depression were 2 to 3 times more likely to report substantial impact on their work roles compared to physicians with minimal to mild depression scores, including a decrease in work productivity (57.7% vs. 18.5%; $p < .001$) and a decrease in work satisfaction (90.8% vs. 36.2%; $p < .001$). The same physicians were 2 to 3 times more likely to report a wide range of dysfunctional and worrisome approaches to seeking mental health care compared to physicians with minimal to mild depression scores, including a higher likelihood that they would self-prescribe antidepressants (30.0% vs. 9.9%; $p < .001$) and a higher likelihood that they would avoid seeking treatment due to concerns about confidentiality (50.7% vs. 17.3%; $p < .001$).

Conclusions: Moderate to severe depression scores are reported by a substantial portion of practicing physicians in Michigan, with important influences on physician work roles and potential negative impact on licensing and medical staff status. The risk of being stigmatized may cause depressed physicians to alter their approach to seeking mental health care, including seeking care outside their medical community and self-prescribing antidepressants. Destigmatization of depression in physicians and interventions to improve the mental health care of physicians in ways that do not compromise their professional standing should receive more attention.

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The risk of depression in physicians,[1–3] the risk of suicide in physicians,[1,4] and the risk of depression and suicide in medical students[5–7] have been addressed in recent studies and editorials. A personal essay addressed the impact of depression on a physician's state licensure status.[8] In order to explore the impact of depression in physicians on professional standing and the impact of fear of stigmatization on mental health care–seeking behaviors on a more structured basis, we conducted a survey of members of the Michigan State Medical Society.

METHOD

Sample

The Michigan State Medical Society has approximately 10,000 practicing physician members, from whom we randomly selected 5000 who were listed as being professionally active and not in training. No weighting or oversampling was done on the basis of age, specialty, gender, or practice locale.

Instruments

The study was approved by the Institutional Review Board of the University of Michigan on the basis of the anonymous distribution of a mailed questionnaire. The questionnaire included a validated depression screening instrument, the Patient Health Questionnaire depression module (PHQ-9),[9] and Likert-style questions about the respondent's personal experiences with depression, health care–seeking behavior, professional role, work and personal satisfaction, sleep disturbance, drug and alcohol use, and demographic information. The Likert-style questions were revised on the basis of feedback from pilot testing with a convenience sample of 45 academic physicians. The questionnaire is available upon request to the authors.

Procedure

The survey was distributed during April 2005 with a postage-paid return envelope. There was no token of appreciation or inducement to respond included except for an introductory letter from the investigators that described depression in physicians as a problem of great concern and asked the addressee to participate in the study in order to help the profession address this important issue. There were explicit statements about the anonymity of the survey, the inability of the investigators to identify the respondent, and the inability of the investigators to contact the addressee in follow-up.

Analysis

Frequencies and summary statistics were calculated on all variables. The medical specialty responses were classified according to standard definitions as primary care, medical specialty, surgical specialty, and hospital-based. The PHQ-9 responses were calculated to create a binomial depression severity classification of minimal to mild depression versus moderate to severe depression based on validated cutoffs.[9] Using t tests and χ^2 when appropriate, comparisons were made between the depression severity classification and all other items. Chi-square tests were also used for comparisons between size of practice community and the mental health care–seeking behaviors of physicians.

RESULTS

Usable responses were received from 1154 physicians, for a response rate of 23%. Note that the Ns reported for many of the subsequent analyses vary because of scattered missing data. The mean age of respondents was 50 years, with a mean of 19 years in medical practice. Seventy-five percent of respondents were male and 96% were board certified. The specialty distribution was roughly equally distributed across the 4 categories: 32% primary care, 28% surgical specialty, 19% medical specialty, and 19% hospital-based (total does not equal 100% due to rounding and missing data). Respondents most frequently reported practicing medicine in a community with a population of 100,001 to 250,000 (29%), with community populations of 10,000 to 100,000 (26%) and greater than 500,000 (19%) the next most frequent community sizes. Of 1151 respondents who provided usable responses, 755 (65.6%) reported experiences with friends who were depressed, 750 (65.2%) reported experiences with family members who were depressed, and 543 (47.2%) reported experiences with other physicians who were depressed. About 43% of all respondents (498/1149) reported that they knew physicians whose professional work had suffered because of depression, and 24% (274/1148) knew physicians whose professional standing had been compromised because of depression.

Table 1. Distribution of PHQ-9 Depression Scores[a]

PHQ-9 Score	N (%)
0–4 (minimal)	772 (66.9)
5–9 (mild)	250 (21.7)
10–14 (moderate)	74 (6.4)
15–19 (moderately severe)	45 (3.9)
20–27 (severe)	11 (1.0)

[a]Two responses were missing, yielding a total of 1152 scores (99.8%). Percentages are based on the total N of 1154.
Abbreviation: PHQ-9 = Patient Health Questionnaire depression module.

Table 1 shows the distribution of depression questionnaire scores. A total of 130 respondents (11.3%) scored positively for moderate to severe depression. Of 129 physicians scoring as moderately to severely depressed, 54 (41.9%) reported that they had ever been diagnosed as depressed, compared to 177 (17.3%) of 1021 with minimal to mild depression scores. An additional analysis showed that 33 (11.6%) of 285 female physicians reported moderate to severe depression, compared to 97 (11.2%) of 865 male physicians, a nonsignificant difference.

Table 2 shows the relationship between the respondents' depression questionnaire scores and their perceptions of the effect of depression on their professional role. Respondents who scored as moderately to severely depressed were significantly (all differences significant to $p < .001$ level) more likely to agree or strongly agree that depression affected their professional roles and responsibilities in several areas, including higher levels of work stress and lower levels of work productivity. Somewhat paradoxical was the fact that those respondents who scored as more severely depressed reported working harder to help lessen their depression, an indication that physicians may attempt to cope with depression by "burying themselves" in their work. In general, physicians reporting moderate to severe depression were 2 to 3 times more likely to report substantial impact on their work and personal roles and satisfaction compared to physicians with minimal to mild depression scores.

Table 3 shows the relationship between severity of depression score and the physician's perception of how being a physician influences his or her approach to seeking mental health care. Those who scored as moderately to severely depressed were significantly (all differences significant to $p < .001$ level) more likely to report that concern about the adverse impact of their depression on their professional standing affected how they sought treatment for their depression, often in ways that would appear to be inefficient, disruptive, or possibly even dangerous (e.g., self-prescribing). In general, physicians with moderate to severe depression were 2 to 3 times more likely to avoid seeking treatment for their depression due to concerns about adverse effects on medical staff status or medical licensing, to seek care outside their home medical

Table 2. The Effect of Being Depressed on Professional Roles and Work Satisfaction

Item	Those With Minimal to Mild Depression Scores Who Agree or Strongly Agree, N (%)[a]	Those With Moderate to Severe Depression Scores Who Agree or Strongly Agree, N (%)[b]	p Value
Difficulty fulfilling professional responsibilities	96 (9.5)	44 (33.8)	< .001
Depression has increased professional stress level	309 (30.7)	105 (81.4)	< .001
Depression has increased personal stress level	377 (37.6)	116 (89.3)	< .001
Depression has decreased work productivity	186 (18.5)	75 (57.7)	< .001
Depression has decreased work satisfaction	363 (36.2)	118 (90.8)	< .001
Working hard helps to lessen my depression	253 (25.2)	68 (52.7)	< .001
High level of satisfaction with personal and family relationships	779 (76.6)	44 (33.9)	< .001

[a]N varies from 1003 to 1017 due to missing responses.
[b]N varies from 127 to 130 due to missing responses.

Table 3. The Effect of Being Depressed on Mental Health Care–Seeking Behaviors

Item	Those With Minimal to Mild Depression Scores Who Agree or Strongly Agree, N (%)[a]	Those With Moderate to Severe Depression Scores Who Agree or Strongly Agree, N (%)[b]	p Value
Avoid seeking treatment due to concerns about confidentiality	174 (17.3)	66 (50.7)	< .001
Avoid seeking treatment due to concerns about stigma	176 (17.5)	68 (52.3)	< .001
Avoid seeking treatment due to negative impact on my practice	153 (15.2)	62 (48.1)	< .001
Prescribed my own antidepressant medication	100 (9.9)	39 (30.0)	< .001
Sought depression care outside my medical community	102 (10.1)	30 (23.1)	< .001
Pay cash for depression care to avoid billing insurance	95 (9.5)	26 (20.5)	< .001
Would not seek depression care due to concerns about losing medical staff privileges	71 (7.1)	32 (24.6)	< .001
Would not seek depression care due to concerns about losing medical license	54 (5.4)	24 (18.4)	< .001

[a]N varies from 1003 to 1017 due to missing responses.
[b]N varies from 127 to 130 due to missing responses.

community, and to pay cash for services so as to avoid filing insurance claims, compared to those with minimal to mild depression scores.

In addition, gender analyses revealed several areas in which female and male physicians differed in the nature of their depression or their approach to mental health care (all differences significant to $p < .001$ level). Women were more likely to report a current or prior diagnosis of depression (81/286 women [28.3%] vs. 153/864 men [17.7%]) and current or prior treatment for depression (93/286 women [32.5%] vs. 162/865 men [18.7%]). It is interesting to note that several more respondents, both men and women, endorsed current or prior *treatment* for depression than endorsed current or prior *diagnosis* of depression. Female physicians were more likely than male physicians to endorse the likelihood that they would prescribe their own antidepressant medication (51/284 women [18.0%] vs. 88/859 men [10.2%]; $p < .001$).

Analysis of the usual nightly sleep reported by respondents (when not on call) showed statistically significant ($p < .001$) differences between those with minimal to mild depression (mean, 6.7 hours of sleep) and those with moderate to severe depression (mean, 5.8 hours). There was also a significant difference in concern about alcohol use, with 78 (7.7%) of 1014 physicians with minimal to mild depression reporting that they agreed or strongly agreed that they are concerned about alcohol use, versus 18 (13.8%) of 130 physicians with moderate to severe depression reporting concerns ($p < .001$).

Finally, an analysis was done of the effect of size of practice community on the mental health care–seeking behavior of physicians. There were nonsignificant trends toward a finding that physicians in smaller communities report a greater likelihood of treatment avoidance than those in larger communities. For example, 17 (17.9%) of 95 physicians in communities smaller than 10,000 population reported that they agreed or strongly agreed that they had prescribed their own antidepressants, compared to 18 (9.1%) of 197 of those in communities of 250,000 to 500,000 population ($p = .017$ for trend across all community sizes). Similar trends were seen when comparing physicians from the same community sizes as above regarding barriers to seeking treatment due to concern about losing medical privileges (13/93 [14.0%] in small communities vs. 12/195 [6.2%] in large communities; $p = .072$) and fear of losing their medical license (11/93 [11.8%] in small communities vs. 7/195 [3.6%] in large communities; $p = .066$).

DISCUSSION

These data paint a grim picture of the prevalence of moderate to severe depression in this sample of Michigan physicians, of the frequency with which these physicians

know of other physicians whose professional responsibilities and roles have been compromised by being depressed, of the perception by physicians with moderate to severe depression that their personal and work roles have been adversely affected by being depressed, and of the high likelihood that fear about potential adverse effects of reporting depression on professional status may compromise a physician's opportunity to receive mental health care appropriately and safely.

More than 1 in 10 physicians reported depression scores in the moderate to severe range. This prevalence is somewhat lower than would be expected for a primary care patient population but higher than for an unselected community-based population. In a primary care patient population assessed by the PHQ-9, about 18% of respondents reported moderate to severe depression scores,[9] higher than the prevalence of moderate to severe depression scores in this sample of physicians. However, the 12-month prevalence of major depressive disorder in a community-based sample was roughly 9% in women and 5% in men,[10] both lower than the corresponding prevalence of moderate to severe questionnaire scores for the physicians in this study. Lifetime prevalence of depression in a community-based sample (roughly 20% for women and 13% for men)[10] is also roughly two thirds of that for physicians in our sample reporting current or prior diagnosis or treatment for depression (roughly 35% for women and 17% for men). Given that questionnaires are overly sensitive and routinely overestimate prevalence compared to criterion-based clinical interviews, these data suggest that physicians are similar to the general population in depression risk.

Of interest is that male and female physicians have the same risk of high questionnaire scores, as opposed to the situation in the general population in which women are generally at greater risk of depression. However, female physicians were more likely to have ever been diagnosed or treated for depression compared to male physicians. Roughly one quarter of all physicians knew of a physician whose professional standing had been adversely affected by being depressed.

The effects of being depressed on physicians practicing in smaller communities are particularly worrisome and worthy of further study. Physicians in smaller communities may feel more vulnerable to scrutiny by hospital medical staff committees, more vulnerable to being reported to state licensing boards, or more susceptible to the adverse effects of stigmatization of mental illness. The overall picture is one in which the well-known stigmatization of patients with depression and mental illness, particularly in the workplace,[11] appears to be at least as great, if not greater, in physicians. The frequency with which physicians appear to self-prescribe antidepressants and feel forced to forego mental health care, to seek care in a haphazard or secretive fashion, or to leave their medical community altogether for treatment is particularly unfortunate, worrisome, and deserving of more detailed study and intervention. The effect of this stigma on the self-care behaviors of women appears to be particularly strong and worrisome.

The generalizability of these data is, of course, limited by their self-report nature and by the survey's relatively low response rate. However, given the highly sensitive nature of the topic and the inability to query nonrespondents, the response rate is remarkably good. From one perspective, it is remarkable that so many physicians were comfortable responding, many with worrisome levels of depression symptoms, when the results themselves speak to the potential harm that could come from having their depression revealed.

CONCLUSIONS

These data are more than sufficient to warrant larger and more rigorous studies of the prevalence of depression in physicians, the impact of depression on professional status, and, most importantly, the testing of interventions to destigmatize depression in physicians. Destigmatization is critical to helping physicians feel comfortable in seeking appropriate and effective mental health care and to not fear being victims of inappropriate sanctions on medical staff privileges and state licensure.

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