Depressive Symptoms and Suicidal Ideation Among Lawyers and Other Law Professionals

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Law professionals are an understudied population that is integral to society. Limited research indicates lawyers experience poor mental health, decreased wellbeing, and suicidality. This cross-sectional study recruited 654 law professionals and responses to a depression scale, the patient health questionnaire 9 (PHQ-9) were compared with the general working population. Lawyers were significantly more likely to report suicidal ideation ''several days'' and ''more than half the days'' as compared with the general working population, with odds ratios (OR) of 6.54 (95% confidence interval [CI] 4.16 to 10.29) and 5.50 (95% CI 2.23 to 13.53) respectively. Lawyers were more likely reported mild (OR = 3.89, 95% CI 3.04 to 4.96), moderate (OR = 5.29, 95% CI 3.61 to 7.76), moderately severe (OR = 9.71, 95% CI 5.50 to 17.14), and severe (OR = 18.34, 95% CI 6.00 to 56.11) depressive symptoms. 17.5% of lawyers in this study were experiencing symptoms equivalent to a diagnosis of a major depressive disorder.

Keywords: attorney, depression, law professional, lawyer, major depressive disorder, patient health questionnaire, PHQ-9, suicidal ideation, well-being

Learning Objectives

- Review previous studies reporting poor mental health and suicidality among lawyers.
- Summarize the new findings on depressive symptoms and suicidal thoughts among lawyers.
- Discuss the practical implications for efforts to improve the well-being of lawyers and other law professionals.

BACKGROUND

Lawyers and other law professionals play a vital role in the functioning of our society. They are leaders in business, government, and community, guiding decision-making, and shaping policy at all levels. Yet despite this societal influence, law professionals are a relatively understudied population. Anecdotal reports and the limited studies that do exist indicate that these workers face many psychological challenges. Law students and legal professionals in the field have individually indicated that they face many mental stressors, including highly elevated incidents of poor mental health and other issues of well-being. While these stressors are also experienced in other demanding professional occupations (eg, medicine) and have been studied accordingly, limited efforts have been made to scientifically understand both the magnitude of the problem and factors within legal work that are associated with the development of reduced psychosocial wellbeing.

Research assessing lawyer well-being is in the early stages. In 2016, a study by Krill et al[1] showed that lawyers in the study had meaningful prevalence of symptoms of depression, anxiety, and stress. This study generated increased interest in lawyer well-being. Even so, scant data exist on which to base decisions regarding actual risk factors for lawyers and potential interventions that might encourage increased wellbeing.

To date, we have identified nine peer-reviewed publications assessing lawyer well-being, all of which report some level of serious concern.[1–9] The suicide rate among lawyers is ranked fourth among working professionals, behind only dentists, pharmacists, and doctors.[10,11] A 2016 study of 13,000 lawyers across 19 states showed 11.5% of practicing lawyers experience suicidal thoughts, and many recent lawyer suicides have been linked to depression.[1] The national lawyer study also showed that lawyers have a high prevalence of depression (28%), anxiety (19%), problematic alcohol use (24% to 36%), substance abuse (11%), and burnout (14%).[1]

The current study investigates the relationship between depressive symptoms, including suicidal ideation, for law professionals as compared with the general working population after controlling for potential confounders. Two groups were compared with the general working population; (1) all law professionals in our study, which includes lawyers, paralegals, legal secretaries, and others, and (2) a subset of this group, comprised of only lawyers.

METHODS

This study was approved by the University of Utah Institutional Review Board prior to data collection. Online informed consent was obtained prior to enrollment in the study. Study participants include judges, lawyers, paralegals, and other support staff, and law students from two different states in the western United States. This analysis excludes students, and only analyzes data from lawyers and other law professionals. Participants were given the option to complete the questionnaire electronically using the REDCap system at the University of Utah, complete the questionnaire over the phone, or be mailed a paper copy of the survey and return it in a self-addressed and stamped envelope. All but three participants chose to complete the survey online. All participants were assigned a random ID number to help protect their identity.

Lawyer and Other Law Professional Data

To maximize participation and minimize selection bias, three recruitment methods were used for this study. The first method of

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Clinical Significance: Law professionals are integral in the functioning of our society and the high prevalence of depression is concerning. Defining prevalence and increased risk of depressive symptoms, suicidal ideation, and likely diagnosis of major depressive disorder among lawyers and law professionals is important to both this occupation and the general public.

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recruitment was to randomly select lawyers from the current membership profiles of attorneys active in the participating state Bar. The random selection was stratified by urban versus rural. Random numbers were generated for each stratified list of active attorneys. Each list was then sorted by the random number and the first 200 on each list were selected. Four hundred randomly selected active attorneys were invited to participate by email. After the initial email, several auto responses for non-deliverable emails or that the attorney no longer worked at that firm were received. This resulted in removal of 54 of the randomly selected participants. Three follow-up emails were sent to the invited participants who had not responded.

The second recruitment method was advertisement in the bi-monthly Bar Journal and at the spring and summer Bar conventions. Advertisements included having a small ad in the journal for 2 months. Advertisement at the conferences included signage directing lawyers to the REDCap website, as well as a team of four research assistants with portable devices inviting attendees to participate.

The last method of recruitment included the invitation of entire firms to participate. Specific firms were not individually selected to be invited to participate, any firm could do so. The option for firms to participate was communicated at Bar conventions. Therefore, firms self-selected to participate and are a convenience sample of all firms in Utah. Fourteen firms chose to participate and provided email addresses of their employees, which included both attorneys and support staff. These were cross-checked with the randomly selected participants. Email invitations to participate were then sent to each employee email provided.

All email invitations stressed that participation was voluntary and any data that participants provided would not be shared with their employer or the participating state Bar except in aggregate. The invitation asked that participants be as honest as possible.

National Health and Nutrition Examination Survey Participants

The National Health and Nutrition Examination Survey (NHANES) is a program of studies designed to assess the health and nutritional status of adults and children in the United States. The information gathered by the NHANES survey provides a snapshot of the health and nutrition of the US population. Each participant represents approximately 50,000 other US residents.[12] These data were chosen as a comparison population, as they have been used in other published studies.[13–15]

Data from the 2017 to 2018 NHANES population were gathered through the NHANES website via the SAS transport files containing the data on the participants. In order to match the lawyer population, only those who were between the ages of 21 to 80, who were employed, and who worked at least 30 hours a week were included. Subjects ($n = 2112$) were included for analysis only if they had data for all depression questions and demographic data.

TABLE 1. Depression Questions

Over the last 2 weeks, how often have you been bothered by the following problems:
Little interest or pleasure in doing things?
Feeling down, depressed, or hopeless?
Trouble falling or staying asleep, or sleeping too much?
Feeling tired or having little energy?
Poor appetite or overeating?
Feeling bad about yourself—or that you are a failure or have let yourself or your family down?
Trouble concentrating on things, such as reading the newspaper or watching TV?
Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual?
Thoughts that you would be better off dead or of hurting yourself in some way?

Depressive Symptoms

We utilized the patient health questionnaire 9 (PHQ-9) nine question validated battery used to predict depression needing clinical interventions (see Table 1 for exact wording of the questions). This questionnaire has also been used in other studies as predictors of suicide attempts and successful suicides.[16–18] Importantly, the nine data elements of the PHQ-9 were also used verbatim in the 2017 to 2018 NHANES assessment. The a priori intent was to make possible a direct comparison between lawyers in this study and the general working population as represented by the NHANES data.

The ordered response choices are based on how the participant was feeling in the past 2 weeks and were (1) not at all, (2) several days, (3) more than half the days, and (4) nearly every day for each of the nine questions. These responses were given a value of 0 to 3, respectively, and were summed to provide a PHQ-9 score of 0 to 27. Validated and commonly used cut points were used to categorize participants into groups of minimal or none (0 to 4), mild (5 to 9), moderate (10 to 14), moderately severe (15 to 19), and severe (20 to 27) for diagnosing Major Depressive Disorder.[16] If participants were missing a response to a depression screener question they were excluded from the analysis (Lawyers and Other Law Professionals $n = 4$, NHANES $n = 268$).

Potential Confounders

An a priori list of potential confounders of age, sex, and body mass index (BMI) were collected. Other potential confounders were not included due to limitations in the NHANES data or the Law Professionals study.

Statistical Analysis

All data were analyzed using SAS 9.4 (Cary, NC). Mean and standard deviations were calculated for continuous data. Frequency and percentage were calculated for categorical data. Assessment or normality was performed on all continuous data used and if normality was not met, non-parametric tests were used to compare continuous variables. Equivalency of age, BMI, and PHQ-9 were assessed using three pairwise TOST tests assuming unequal variances (Satterthwaite) to compare randomly selected participants, self-selected participants, and participants from firms for each of the three variables. Logistic regression models were used to calculate crude and adjusted odds ratios (ORs) for relationships between depression responses and lawyer versus general working population. Potential confounders were decided a priori based on the available data. A difference of 10% between crude and adjusted ORs was used as the threshold for confounding. The primary comparison was comparing NHANES participants with all law professionals, and the secondary comparison was comparing NHANES participants with lawyers only, excluding other law professionals.

RESULTS

The study consisted of 2816 total study participants; 2122 NHANES working population and 694 lawyers and law professionals, 554 of which were lawyers. A total of 9254 participants were in the NHANES population, but 4160 participants were excluded due to lacking responses for one or more of the depression screener question. An additional 2867 participants were excluded because they worked fewer than 30 hours a week. One hundred five were

excluded because they were younger than 21 ($n = 86$) or were missing data for a potential confounder ($n = 19$).

There were 696 total lawyers and other law professional participants who consented to participate. Two of these were excluded because of missing sex ($n = 1$) or missing one or more depressive screener responses ($n = 1$). BMI and age were statistically equivalent for lawyers recruited from the three different methods ($P < 0.0001$, data not shown). PHQ-9 was statistically equivalent between randomly selected participants and both self-selected participants and participants from firms lawyers

TABLE 2. Descriptive Data for NHANES Working Population, All Law Professionals, Lawyers Only, and Total Sample

Demographics	NHANES Working Population $N = 2{,}122$ (Mean and SD or *n*, %)	Law Professionals $n = 694$ (Mean and SD or *n*, %)	Lawyers Only $N = 554$ (Mean and SD or *n*, %)	Total ($n = 2{,}816$) (Mean and SD or *n*, %)
Characteristics				
Age (mean)	44.1 (13.5)	47.9 (12.0)	47.2 (12.0)	44.7 (13.3)
BMI (mean)	30.0 (7.2)	27.9 (5.9)	27.5 (5.9)	29.5 (7.0)
Patient health questionnaire 9 (PHQ-9) composite score	2.5 (3.5)	5.3 (5.1)	5.3 (5.0)	3.1 (4.0)
Gender				
Male	1174 (55.3%)	410 (59.1%)	368 (66.4%)	1584 (56.3%)
Female	948 (44.7%)	284 (40.9%)	186 (33.6%)	1232 (43.8%)
Patient health questionnaire (PHQ-9) individual questions				
Little interest or pleasure in doing things?				
Not at all	1693 (79.8%)	411 (59.2%)	323 (58.3%)	2104 (74.7%)
Several days	287 (13.5%)	202 (29.1%)	164 (29.6%)	489 (17.4%)
More than half the days	95 (4.5%)	55 (7.9%)	48 (8.7%)	150 (5.3%)
Nearly every day	47 (2.2%)	26 (3.8%)	19 (3.4%)	73 (2.6%)
Feeling down, depressed, or hopeless?				
Not at all	1740 (82.0%)	389 (56.1%)	306 (55.2%)	2129 (75.6%)
Several days	284 (13.4%)	229 (33.0%)	185 (33.4%)	513 (18.2%)
More than half the days	58 (2.7%)	44 (6.3%)	37 (6.7%)	102 (3.6%)
Nearly every day	40 (1.9%)	32 (4.6%)	26 (4.7%)	72 (2.6%)
Poor appetite or overeating?				
Not at all	1676 (79.0%)	325 (46.8%)	267 (48.2%)	2001 (71.2%)
Several days	291 (13.7%)	241 (34.7%)	191 (34.5%)	532 (18.9%)
More than half the days	87 (4.1%)	87 (12.5%)	67 (12.1%)	174 (6.2%)
Nearly every day	68 (3.2%)	41 (5.9%)	29 (5.2%)	109 (3.9%)
Feeling bad about yourself- or that you are a failure or have let yourself or your family down?				
Not at all	1850 (87.2%)	398 (57.4%)	314 (56.7%)	2248 (79.8%)
Several days	197 (9.3%)	198 (28.5%)	159 (28.7%)	395 (14.0%)
More than half the days	38 (1.8%)	46 (6.6%)	37 (6.7%)	84 (3.0%)
Nearly every day	37 (1.7%)	52 (7.5%)	44 (7.9%)	89 (3.2%)
Trouble concentrating on things, such as reading the newspaper or watching television?				
Not at all	1858 (87.6%)	453 (65.3%)	362 (65.3%)	2311 (82.1%)
Several days	178 (8.4%)	173 (24.9%)	138 (24.9%)	351 (12.5%)
More than half the days	42 (2.0%)	42 (6.1%)	35 (6.3%)	84 (3.0%)
Nearly every day	44 (2.1%)	26 (3.8%)	19 (3.4%)	70 (2.5%)
Moving or speaking so slowly that other people could have noticed? Or the opposite-being so fidgety or restless that you have been moving around a lot more than usual?				
Not at all	1966 (92.7%)	627 (90.4%)	508 (91.7%)	2593 (92.1%)
Several days	109 (5.1%)	48 (6.9%)	30 (5.4%)	157 (5.6%)
More than half the days	25 (1.2%)	15 (2.2%)	14 (2.5%)	40 (1.4%)
Nearly every day	22 (1.0%)	4 (0.6%)	2 (0.4%)	26 (1.0%)
Thoughts that you would be better off dead or hurting yourself in some way?				
Not at all	2072 (97.6%)	618 (89.1%)	488 (88.1%)	2690 (95.5%)
Several days	35 (1.7%)	58 (8.4%)	52 (9.4%)	93 (3.3%)
More than half the days	9 (0.4%)	14 (2.0%)	11 (2.0%)	23 (0.8%)
Nearly every day	6 (0.3%)	4 (0.6%)	3 (0.5%)	10 (0.4%)
Trouble falling or staying asleep, or sleeping too much?				
Not at all	1424 (67.1%)	267 (38.5%)	222 (40.1%)	1691 (60.1%)
Several days	461 (21.7%)	283 (40.8%)	222 (40.1%)	744 (26.4%)
More than half the days	123 (5.8%)	85 (12.3%)	65 (11.7%)	208 (7.4%)
Nearly every day	114 (5.4%)	59 (8.5%)	45 (8.1%)	173 (6.1%)
Feeling tired or having little energy?				
Not at all	1135 (53.5%)	185 (26.7%)	153 (27.6%)	1320 (46.9%)
Several days	699 (32.9%)	326 (47.0%)	260 (46.9%)	1025 (36.4%)
More than half the days	156 (7.4%)	103 (14.8%)	82 (14.8%)	259 (9.2%)
Nearly every day	132 (6.2%)	80 (11.5%)	59 (10.7%)	212 (7.5%)
PHQ-9 composite score categories				
Minimal or none (0–4)	1729 (81.5%)	380 (54.8%)	301 (54.3%)	2109 (74.9%)
Mild (5–9)	283 (13.3%)	194 (28.0%)	156 (28.2%)	477 (16.9%)
Moderate (10–14)	77 (3.6%)	67 (9.7%)	56 (10.1%)	144 (5.1%)
Moderately severe (14–19)	28 (1.3%)	40 (5.8%)	31 (5.6%)	68 (2.4%)
Severe (20–27)	5 (0.2%)	13 (1.9%)	10 (1.8%)	18 (0.6%)

NHANES, The National Health and Nutrition Examination Survey.

($P < 0.0001$, data not shown). Firm lawyers and self-selected lawyers were not statistically equivalent for PHQ-9; however, they were nearly statistically equivalent ($P = 0.1179$, data not shown). Therefore, we were comfortable combining all lawyers into a single group for these analyses, regardless of the recruitment method. Lawyers and law professionals were older (mean of 47.9 years) and less obese (mean BMI of 27.9 kg/m^2) as compared with the NHANES working population (mean age of 44.1 years and mean BMI of 30.0 kg/m^2). Lawyers were practicing a variety of types of law; civil litigation ($n = 198$, 35.7%), transactional law ($n = 119$, 21.5%), administrative, government, or regulatory law ($n = 74$, 13.4%), family law ($n = 60$, 10.8%), criminal litigation ($n = 44$, 7.9%), other ($n = 59$, 10.6%). Complete demographic data for these populations can be found in Table 2.

Overall, all law professionals, and lawyers in particular, reported a high frequency of having depressive symptoms, reporting feeling depressive symptoms several days or more often approximately 40% of the time for most questions with 45.7% having some

TABLE 3. Crude and Adjusted[†] Odds Ratio Comparing NHANES Working Population With Law Professionals and Lawyers Only

	Law Professionals		Lawyers Only	
	Crude Model OR (95% CI)	Adjusted[†] Model OR (95% CI)	Crude Model OR (95% CI)	Adjusted[†] Model OR (95% CI)
Little interest or pleasure in doing things?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	2.90* (2.35, 3.58)	3.39 *(2.72, 4.22)	3.00* (2.39, 3.75)	3.57* (2.82, 4.53)
More than half the days	2.39* (1.68, 3.38)	2.75* (1.92, 3.94)	2.65* (1.84, 3.82)	3.07* (2.10, 4.50)
Nearly every day	2.28* (1.40, 3.72)	2.94* (1.76, 4.88)	2.12* (1.23, 3.66)	2.61* (1.48, 4.60)
Feeling down, depressed, or hopeless?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	3.61* (2.94, 4.43)	4.20* (3.39, 5.21)	3.70* (2.97, 4.62)	4.42* (3.50, 5.59)
More than half the days	3.39* (2.26, 5.10)	4.16* (2.73, 6.33)	3.63* (2.36, 5.58)	4.55* (2.90, 7.12)
Nearly every day	3.58* (2.22, 5.77)	4.74* (2.87, 7.82)	3.70* (2.22, 6.15)	4.74* (2.78, 8.10)
Trouble falling or staying asleep, or sleeping too much?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	3.27* (2.69, 3.99)	3.50* (2.86, 4.30)	3.09* (2.50, 3.83)	3.43* (2.75, 4.28)
More than half the days	3.69* (2.72, 5.00)	4.48* (3.26, 6.16)	3.39* (2.43, 4.73)	4.26* (3.01, 6.04)
Nearly every day	2.76* (1.96, 3.88)	3.36* (2.36, 4.78)	2.53* (1.74, 3.68)	3.18* (2.16, 4.68)
Feeling tired or having little energy?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	2.86* (2.33, 3.51)	3.53* (2.85, 4.38)	2.76* (2.21, 3.44)	3.52* (2.79, 4.44)
More than half the days	4.05* (3.02, 5.43)	5.41* (3.98, 7.37)	3.90* (2.84, 5.35)	5.43* (3.89, 7.59)
Nearly every day	3.72* (2.71, 5.11)	5.35* (3.81, 7.51)	3.32* (2.34, 4.71)	5.07* (3.49, 7.36)
Poor appetite or overeating?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	4.27* (3.47, 5.26)	5.96* (4.75, 7.48)	4.12* (3.30, 5.15)	6.09* (4.76, 7.79)
More than half the days	5.16* (3.75, 7.10)	7.97* (5.64, 11.26)	4.83* (3.43, 6.82)	7.89* (5.42, 11.48)
Nearly every day	3.11* (2.07, 4.66)	4.73* (3.07, 7.29)	2.68* (1.71, 4.21)	4.08* (2.52, 6.63)
Feeling bad about yourself- or that you are a failure or have let yourself or your family down?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	4.67* (3.73, 5.85)	5.27* (4.16, 6.67)	4.76* (3.74, 6.05)	5.41* (4.20, 6.97)
More than half the days	5.63* (3.61, 8.76)	6.99* (4.39, 11.13)	5.74* (3.59, 9.16)	6.99* (4.26, 11.48)
Nearly every day	6.53* (4.23, 10.10)	9.06* (5.73, 14.31)	7.01* (4.45, 11.02)	9.59* (5.93, 15.50)
Trouble concentrating on things, such as reading the newspaper or watching television?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	3.99* (3.16, 5.03)	4.50* (3.53, 5.74)	3.98* (3.10, 5.11)	4.54* (3.50, 5.89)
More than half the days	4.10* (2.64, 6.37)	4.80* (3.05, 7.55)	4.28* (2.69, 6.79)	4.96* (3.07, 8.03)
Nearly every day	2.42* (1.48, 3.98)	3.08* (1.85, 5.13)	2.22* (1.28, 3.84)	2.62* (1.49, 4.61)
Moving or speaking so slowly that other people could have noticed? Or the opposite-being so fidgety or restless that you have been moving around a lot more than usual?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	1.38 (0.97, 1.96)	1.56* (1.09, 2.23)	1.07 (0.70, 1.61)	1.18 (0.77, 1.80)
More than half the days	1.88 (0.99, 3.59)	2.21* (1.15, 4.28)	2.17* (1.12, 4.20)	2.49* (1.26, 4.92)
Nearly every day	0.57 (0.20, 1.66)	0.56 (0.19, 1.66)	0.35 (0.08, 1.50)	0.32 (0.07, 1.38)
Thoughts that you would be better off dead or hurting yourself in some way?				
Not at all	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Several days	5.56* (3.62, 8.53)	5.87* (3.79, 9.09)	6.30* (4.06, 9.79)	6.54* (4.16, 10.29)
More than half the days	5.22* (2.25, 12.11)	5.99* (2.55, 14.06)	5.19* (2.14, 12.59)	5.50* (2.23, 13.53)
Nearly every day	2.24 (0.63, 7.95)	3.15 (0.85, 11.71)	2.12 (0.53, 8.52)	2.50 (0.59, 10.56)
PHQ-9 summary score				
Minimal or none (0–4)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)	1.00 (Reference)
Mild (5–9)	3.12* (2.52, 3.86)	3.73* (2.98, 4.68)	3.17* (2.51, 3.99)	3.89* (3.04, 4.96)
Moderate (10–14)	3.96* (2.80, 5.59)	4.85* (3.39, 6.94)	4.18* (2.90, 6.02)	5.29* (3.61, 7.76)
Moderately Severe (14–19)	6.50* (3.69, 10.67)	10.08* (5.94, 17.10)	6.36* (3.76, 10.76)	9.71* (5.50, 17.14)
Severe (20–27)	11.81* (4.19, 33.34)	20.83* (7.17, 60.48)	11.49* (3.90, 33.85)	18.34* (6.00, 56.11)

NHANES, The National Health and Nutrition Examination Survey.
*Indicates $P < 0.05$.
[†]Adjusted for age, gender, and body mass index.

level of depressive symptoms and 17.5% having moderate to severe depressive symptoms. In general, lawyers and law professionals reported more frequent feelings of depression as compared with NHANES general working population. The single exception to this trend is the lawyers' and other law professionals' responses to the question about ''moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual?'' The differences among this variable were less pronounced, with only 2-fold increased odds ratios for those reporting ''more than half the days'' for this population, as compared with the 4- to 7-fold increased OR for most of the other response levels for the other questions (Table 3).

We found that with only one exception, lawyers and law professionals experienced more depressive symptoms compared with the general working population. The difference was particularly pronounced for suicidal ideation, with adjusted ORs between 5.50 and 6.54 for most categories. Suicidal ideation is also the most problematic and indicative of an advanced stage of depressive symptomology. The strongest associations between an individual question and lawyers or other law professionals as compared with the general working population were seen for responses to the question of how frequently participants were feeling bad about themselves or that they were a failure. The adjusted ORs ranged from approximately 5.50 to 9.50 for the different response levels.

Statistically significant dose responses, an increasing strength of association with increasing frequency of reported depressive symptoms were seen among all individual questions (data not shown) using a test for trend. For example the responses to the question of the frequency in the past 2 weeks for ''Feeling bad about yourself- or that you are a failure or have let yourself or your family down?'' the odds ratios are 5.41, 6.99, and 9.59 for the responses of ''several days,'' ''more than half the days,'' and ''nearly every day'' respectively. However, several of the most extreme responses of ''Nearly every day'' were weaker than the less extreme response of ''More than half the days.''

Lawyers and law professionals were statistically significantly older, more likely to be men, and have a lower BMI (data not shown). Age, sex, and BMI were confounders in the relationships assessed as can be observed in the more than 10% change between crude and adjusted ORs.

The categorized summary score for the PHQ-9 shows the most striking results for comparisons between the NHANES population and both all law professionals and lawyers only. There is a strong dose response with increasing severity, with the adjusted ORs being statistically significantly related to both lawyers only and all law professionals ranging from 3.73 to 20.83 after adjustment for confounders.

DISCUSSION

In sum, we found that when compared with the general working population as benchmarked on the NHANES, law professionals and lawyers indicated that they experience more depressive symptoms. Specifically, they indicated that they experience little pleasure in doing things, have difficulties with sleep, feel depressed, struggle with energy levels, eating habits, and even consider self-harm (ie, suicidal ideation) at as much as five times more than the general working population. The PHQ-9 has demonstrated ability to predict a diagnosis of Major Depressive disorder at a cutoff of 10, with a sensitivity of 85% and a specificity of 89%, as reported in a pooled estimate from 16 different studies.[19] This would indicate that 17.5% of our lawyers likely have a depressive disorder.

The PHQ-9 summary score, in addition to the single question about suicidal ideation, also has a strong relationship with suicide attempts and successful suicides.[18] There is a 10-fold increase in both suicide attempts and successful suicides among those reporting ''nearly every day'' as compared with ''not at all'' for the individual question about self-harm.[18] PHQ-9 summary score as well as the single question about suicidal ideation also has a strong relationship with suicide attempts and successful suicides.[18] A study reported 10-fold increase in both suicide attempts and successful suicides among those reporting ''nearly every day'' as compared with ''not at all'' for the individual question about self harm.[18] These findings support the notion that lawyers and law professionals may be experiencing a work environment that precipitates greater stress and lower well-being. Consistent with job-demands-resources theory, future research should investigate the various aspects of law professionals' and lawyers' jobs that may be the primary causes of the current findings.

In terms of practical implications, the current study should help open the eyes of leaders in law firms, state bars, and other similar organizations that too many lawyers show significant signs of distress. Given the levels of depressive symptoms endorsed in these data, there is little wonder why turnover rates for lawyers and law professionals are also high,[20,21] among other negative phenomenon (ie, actual suicidal behavior). Lawyers and other law professionals should investigate specific actions that organizations and individuals can take to intervene to avoid the onset of depressive symptoms, and should also partner with researchers to test the efficacy of their efforts.

Although a necessary first step, the current study is not without limitations. Every effort was made to ensure the representativeness of the sample, but further testing and verification is needed in broader samples, perhaps inclusive of more states' Bars and so forth. Additionally, there were noted differences between the law professionals' cohort and the NHANES demographics. These differences did not appear to impact the results meaningfully, but rather than controlling for these differences, perhaps modeling them overtly is an important future step. There is likely uncontrolled confounding from factors including potential confounders not addressed include socioeconomic status, history of depression, substance abuse, and alcohol abuse. We were able to control for age, sex, and BMI. However, the probability that uncontrolled confounding would negate a large OR is unlikely.

Future research should include further epidemiological work, as well as intervention studies where science-based interventions are deployed to see if the levels of depressive symptoms can be reduced. Additionally, researchers may consider partnering with educational institutions to train future law professionals and lawyers to help them avoid these outcomes. This may include both resilience training as well as training on the primary drivers of depression from a job-demands perspective.

CONCLUSION

As a preliminary study of the prevalence of depression, the current study serves two major purposes. First, it provides a significant warning to lawyers and other law professionals concerning the issue of depression within their occupation. It may also serve as a verification of suspected challenges that were not fully verified previously. Second, it provides a much needed starting point and call to action for researchers to focus on improving the well-being of lawyers and other law professionals, a group of individuals who are integral to the operations of our modern society.

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