

## Accepted Manuscript

“I would never want to have a mental health diagnosis on my record”: A survey of female physicians on mental health diagnosis, treatment, and reporting

Katherine J. Gold MD MSW MS, Louise B. Andrew MD JD, Edward B. Goldman JD, Thomas L. Schwenk MD

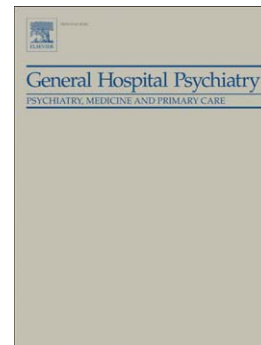
PII: S0163-8343(16)30128-1  
DOI: doi: [10.1016/j.genhosppsy.2016.09.004](https://doi.org/10.1016/j.genhosppsy.2016.09.004)  
Reference: GHP 7140

To appear in: *General Hospital Psychiatry*

Received date: 2 June 2016  
Revised date: 8 September 2016  
Accepted date: 10 September 2016

Please cite this article as: Gold Katherine J., Andrew Louise B., Goldman Edward B., Schwenk Thomas L., “I would never want to have a mental health diagnosis on my record”: A survey of female physicians on mental health diagnosis, treatment, and reporting, *General Hospital Psychiatry* (2016), doi: [10.1016/j.genhosppsy.2016.09.004](https://doi.org/10.1016/j.genhosppsy.2016.09.004)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



**“I would never want to have a mental health diagnosis on my record”: A survey of female physicians on mental health diagnosis, treatment, and reporting**

Katherine J. Gold, MD MSW MS (Corresponding Author)  
Department of Family Medicine  
University of Michigan  
1018 Fuller Street  
Ann Arbor, MI 48104-1213  
Phone: 734-998-7120 x323  
Fax: 734-998-7335  
ktgold@umich.edu

Louise B. Andrew MD JD  
Fellow, International Federation of Emergency Medicine  
President, Rejuvacare.org  
www.MDMentor.com  
lbandrew@gmail.com

Edward B. Goldman, JD  
Department of Obstetrics & Gynecology  
University of Michigan Law School  
University of Michigan  
Ann Arbor, MI  
egoldman@umich.edu

Thomas L. Schwenk, MD  
Division of Health Sciences  
University of Nevada School of Medicine  
Reno, Nevada  
tschwenk@medicine.nevada.edu

Article data: Abstract: 197 words, text: 4093 words, tables: 4  
Running title: Mental health treatment and disclosure among female physicians  
Keywords: physicians, women, mental health, psychiatric treatment, medical licensing, stigma  
Disclosures: No author has any conflicts of interest.  
Funding: None

Acknowledgements: the authors wish to thank Ms. Katie Grode for her assistance in developing and formatting the on-line survey.

**“I would never want to have a mental health diagnosis on my record”: A survey of female physicians on mental health diagnosis, treatment, and reporting**

ACCEPTED MANUSCRIPT

Abstract

Introduction: Physicians have high rates of suicide and depression. Most state medical boards require disclosure of mental health problems on physician licensing applications, which has been theorized to increase stigma about mental health and prevent help-seeking among physicians.

Methods: We surveyed a convenience sample of female physician-parents on a closed Facebook group. The anonymous 24-question survey asked about mental health history and treatment, perceptions of stigma, opinions about state licensing questions on mental health, and personal experiences with reporting.

Results: 2106 women responded, representing all 50 states and the District of Columbia. Most respondents were ages 30-59. Almost 50% of women believed they had met criteria for mental illness but had not sought treatment. Key reasons for avoiding care included a belief they could manage independently, limited time, fear of reporting to a medical licensing board, and the belief that diagnosis was embarrassing or shameful. Only 6% of physicians with formal diagnosis or treatment of mental illness had disclosed to their state.

Conclusions: Women physicians report substantial and persistent fear regarding stigma which inhibits both treatment and disclosure. Licensing questions, particularly those asking about a diagnosis or treatment rather than functional impairment may contribute to treatment reluctance.

## Introduction

Medicine is a stressful occupation and physicians and medical trainees have higher risk for burnout and for suicide than the general population.<sup>1-4</sup> Research has shown that both male and female physicians have similar risk factors for suicide as the general population including depression and other mental health conditions but also are more prone to job stress as a risk factor.<sup>5</sup> Studies also demonstrate higher rates of psychological distress among female medical trainees<sup>6,7</sup> as well as higher rates of depression<sup>8</sup> or history of depression.<sup>9</sup> While a larger number of suicides are completed by male physicians,<sup>2,3,10,11</sup> a meta-analysis showed a higher rate of suicide for men compared with the general population (1.41) but an even more pronounced risk for female physicians whose rate is even higher than the general population (2.27).<sup>5,10</sup>

Stigma regarding mental illness among medical trainees and physicians is possibly greater than in the general population.<sup>9,12,13</sup> Stigma surrounding mental illness has been documented repeatedly in the general population over the last 40 years<sup>14</sup> and limits appropriate help-seeking and treatment<sup>14,15</sup> in all populations, most especially in the medical field.<sup>12,16,17</sup>

A unique barrier to successful diagnosis and treatment of mental disorders among physicians and other professional groups such as lawyers is that in many states, these professionals are required to report any mental illness diagnosis or treatment to their state licensing board. Although in some states questions are limited to illness which impairs or may impair their work performance, other states ask blanket questions about whether the physician has been diagnosed or treated within the last 2, 5, 10 years or even ever in their lifetime. A 2009 review found 42/51 (86%) of state licensing applications had questions about mental health.<sup>18</sup> Physician disclosure of such a diagnosis, even for a common, stable and easily treatable lifelong condition such as anxiety or depression may lead to a range of adverse consequences depending on the state. These can range from simply being required to submit a letter from the primary treating provider which documents fitness to practice, to being asked to appear before state board examiners, to being required to undergo (and pay for) an examination by a board-appointed physician, provide extensive or on-going medical records, enroll in

a Physician Health Program, pay for inpatient or intensive outpatient treatment followed by long term monitoring, or agree to restrictions of practice.

A number of authorities have suggested that broad questions about mental health by licensing boards provide a significant barrier to appropriate treatment for physicians with mental illness and increase the stigma of these disorders and treatment.<sup>19,20</sup> Others have raised concerns that broad questions which do not focus on current impairment violate the Americans with Disabilities Act.<sup>21-23</sup> We could identify no studies which assessed whether apprehension about such questions actually influence physician decisions about seeking help or treatment for mental illness. Our study sought to identify self-reported history of mental illness among a group of female physicians, attitudes about mental illness, treatment, and reporting, and impact of state board requirements on help-seeking.

## **Methods**

We identified a closed Facebook group for physicians who are also mothers, which had approximately 57,000 members at the time of the survey (not all members are active on the site at any time). Physicians may be added only by recommendation of another female physician member to try to ensure that only the population of interest is participating. We selected this group as it was a large cohort of physicians representing a variety of specialties. We are not aware of a similar large group for male physicians and chose this group in part, because it had participants across all specialties. We developed an anonymous Qualtrics survey and with permission of the Facebook group administrator, posted a total of four invitations to participate in the study on the main Facebook page for the group, each with an electronic link to the on-line survey. The survey was open for 8 weeks from February to April 2016 and could only be accessed through the link on the closed Facebook site. Group participants were not privately notified of the survey. The study was reviewed and approved by the University's Institutional Review Board prior to initiation.

The survey consisted of 20 quantitative questions and 4 brief open-ended questions covering the domains of knowledge and attitudes about mental health questions on state medical licensing

applications, as well as personal mental health experience, treatment, and reporting. The survey was designed based on the limited literature about physicians, mental health, and state licensing; no validated surveys exist for this topic. We included basic demographics including age and state(s) of practice, but minimized collection of potentially-identifying information given the sensitivity of the topic. We grouped age and specialty into larger categories to protect confidentiality and did not ask about years in practice as our prior studies on physicians have shown high collinearity between age and years in practice. Open-ended questions addressed whether some women with a history of a mental illness had or had not sought treatment as well as women's experiences with reporting or not reporting mental health conditions to state medical licensing boards. Among those who did not seek treatment and reported one or more contributing reasons, we made a category for responses related to stigma ("getting a diagnosis would be embarrassing or shameful"; "afraid colleagues, staff, or other professionals would find out"; "diagnosis would make me appear less competent or able to do my job"; or "didn't think physicians should need mental health treatment.")

Quantitative data were analyzed using summary statistics and chi-squared. We performed multivariable logistic or ordinal logistic regression to evaluate attitudes about mental health questions on licensing applications while controlling for age, specialty and history of untreated mental illness. We set level of significance at  $p \leq 0.05$ . As the qualitative responses were typically just brief sentences, one author (KJG) analyzed this data using content analysis to identify common themes and narratives. Similar responses were grouped to help understand both common sentiments and outliers. We did not use a formal coding structure due to the brief nature of the answers. Age and specialty questions had 5% missing data, and all other questions had less than 1% missing data.

## **Results**

**Demographics:** A total of 2364 participants started the survey. 255 women completed no more than three of the 24 questions and were excluded from the analysis leaving a usable sample size of 2109. 357 physicians provided qualitative comments. Participants were typically 30-44 years old and

covered a broad range of specialties (Table 1). All respondents had an active U.S. medical license within the last five years and represented physicians in all 50 states and the District of Columbia.

Among the respondents 689 (33%) noted they had been given a mental health diagnosis at some point since medical school, 959 (46%) reported they had been treated for a mental health condition, and 1009 reported either diagnosis or treatment. In ordinal logistic regression, there was no relationship between specialty and having been diagnosed or treated with a mental health condition. However, diagnosis or treatment rose with age so that compared to the youngest women (ages 25-29), those who were 55-59 had 4.86 higher odds (CI 1.53-15.4,  $p=0.007$ ) and those who were 60 or older had 13.2 higher odds (CI 2.45-71.5,  $p=0.003$ ) of having been diagnosed or treated.

Knowledge of state requirements: We queried participants about whether the state where they currently practice required disclosure of current mental health diagnoses or treatment when applying for a new or renewal license; 962 (46%) reported they were not sure. We also asked if disclosure was required only for conditions which “impair or could impair” function as a physician; for this question, 1219 (58%) physicians answered “not sure.”

Experiences when disclosing mental health conditions: Disclosure of mental health conditions to state medical boards was rare, occurring in just 62 (6%) of those women who reported having been given a prior mental health diagnosis or having undergone treatment. Of those who did disclose to their state board, 21 (34%) were required to submit documentation from their treating physician, 10 (16%) from multiple physicians, 10 (16%) were required to appear before the board or be examined by a board-appointed physician, 11 (18%) were required to participate in a Physician Health Program, and 1 (2%) had limitations placed on her license. For some women, the consequences of reporting were minimal:

*“For my medical illness investigation they strongly suggested I self-refer to a physician health plan for \$300. [I did not.] I would like to go to counseling but I don’t want to appear unstable in case this ever comes up again.”*



*"I think I just had to include dates of treatment and medications. I just remember reporting a summary of care and no further action was needed."*

However, other physicians found the sequelae of reporting to be stressful. One physician who disclosed her well-controlled depression to a state board in the 1990s (this state currently still requires disclosure of any mental health diagnoses), reported being made to meet with a medical board-appointed psychiatrist for 15 minutes at Starbucks and charged \$1000. Processing of the paperwork delayed the start of her residency:

*"I then had to check in with a compliance officer every three months who would page at random, usually when I was scrubbed into surgery, and announce that he was outside and needed to check in."*

She also explained to her co-residents why she had a delayed start date.

*"They said that they had been told to lie on the form, but that many also just wouldn't seek help. If I had known about this requirement on the state licensing application, I would have not applied for residencies in [that state] or at least I would have changed my rank order."*

Another physician described:

*"My mental health issues are directly related to chronic illness. I was required to do a face to face interview with a board member and almost six months of "retraining/supervision" because I had been off work for 2 years. This was imposed by the board, despite NO adverse actions in my past and active licensure in another state."*

One physician who had left medical practice because of her experience after disclosure of a mental illness shared:

*"All of my fears were realized when I did report it. I was placed in a very strict and punitive PHP that didn't allow me to take meds written by my doctor for anxiety and insomnia. I am now not practicing at all because of this."*

Reasons for nondisclosure to the state: Of the 1009 respondents who had a history of actual mental health diagnosis or treatment, only 56 (6%) of the 1000 answering this question responded that they had disclosed this information on a licensing application. 288 provided reasons for not disclosing. (Table 3) The most common reasons listed were the beliefs that the condition didn't pose any potential safety risk to patients (75%), wasn't relevant to clinical care (70%), and wasn't the business of the state medical board (63%). Some affected physicians may have lived in states which did not require disclosure, or limited disclosure to current conditions or those causing actual impairment.

Do state board mental health queries impact treatment-seeking? We were curious whether physicians believed that state medical board licensing questions which ask about mental health actually impact personal decisions about seeking treatment. 1574 (75%) of respondents agreed or strongly agreed that medical board questions about whether a physician has ever had a mental health diagnosis or treatment impacts decisions about seeking treatment (13% disagreed/strongly disagreed and 11% were not sure). We used ordered logistic regression to assess whether personal diagnosis or treatment with a mental health disorder impacted attitudes about board queries. In this analysis, we controlled for age, specialty, history of diagnosis or treatment for mental illness, and whether the illness was ever reported to a state board. None of these factors were significant predictors.

Reasons for not seeking mental health treatment: We also asked if participants felt that at any time since medical school they believed they met diagnostic criteria for a mental health problem but did not seek treatment. 919 (44%) of women agreed and 136 (6%) were not sure. In the “not sure” category, 121 of these women responded positively to at least one of the reasons for not seeking treatment. Therefore, we elected to combine the 919 and 121 for a total of 1040 women likely meeting criteria but not seeking treatment. Top reasons for not seeking treatment included women’s belief that they could get through this without help (68%), lack of time (52%), belief that having a diagnosis would be embarrassing or shameful (45%) and not ever wanting to report diagnosis to a medical board or hospital (44%). (Table 2) Using our “stigma” category, we found that 714/1014 (69%) of this group identified a stigma-related reason for avoiding treatment.

In logistic regression we evaluated those physicians who had been given a diagnosis or felt they met criteria for mental illness but did not seek treatment, controlling for age and specialty. Age did not impact decision to seek treatment. Compared to primary care physicians, two specialty groups were significantly less likely to seek treatment: specialty training requiring a pediatric residency (OR: 0.60, CI: 0.43-0.83,  $p=0.002$ ) and being in surgical or surgical specialty (OR: 0.64, CI: 0.45-0.89,  $p=0.009$ ).

We then looked at stigma-related reasons for not seeking treatment, but found no significant differences across age or specialty, suggesting that stigma was a more universal construct.

Qualitative responses revealed widespread perceptions of stigma around mental illness among physicians and further elucidate how stigma and potential consequences limit help-seeking and disclosure to state medical boards.

*“This is a huge problem for physicians. I directly know of MDs that could qualify for DSM criteria for depression and anxiety that refuse to get help and cite board reprimand and punitive intervention as the primary cause of not seeking professional help.”*

A number of respondents commented on stories from peers.

*“[I heard] horror stories from other physicians that got identified by the medical board physician health program and were required to pay >\$10,000 out-of-pocket for evaluation and had daily random drug and alcohol tests—for a diagnosis of postpartum depression.”*

Table 4 includes common themes and representative quotes from physicians on these topics.

Self-prescribing and cash for medication: Given prior reports in the literature about physician self-treatment and informal treatment (suggested or prescribed by a peer without a formal physician patient relationship) for mental health conditions, we asked about self and informal treatment and efforts to protect privacy. Of participants who either had received a diagnosis or treatment for a mental health condition since medical school or believed they had met criteria for mental illness but did not seek treatment, 274/1495 (18%) reported writing their own prescription, asking a friend for the prescription or doing both. Among physicians who reported seeking treatment for mental illness since medical school, 115/987 (12%) women reported paying cash for a prescription related to mental health to avoid insurance company knowledge of the medication, 341/987 (35%) deliberately sought treatment from a provider in a different city or health system so as to avoid insurance disclosure.

One physician commented,

*“I thought that no matter what health system (my own or other, or what state, treatment would never really truly be private in the setting of my career path as a physician.”*

Some physicians reported not disclosing a mental health diagnosis due to perceived fears of being unable to get health, life, or disability insurance. A number of women noted this fear had been realized after seeking help for depression or other mental illness.

## **Discussion**

To our knowledge, this is the one of the few studies assessing barriers to mental health treatment among female physicians, and the only study to query physician attitudes and responses to mental health questions on state medical licensing applications. Half of the physicians in our study acknowledged prior diagnosis or treatment for mental illness since they had completed medical school but this was rarely disclosed to their state medical board. Although some physicians may reside in states which do not require mental illness disclosure (8 states out of the 50 states plus the District of Columbia), Gold, unpublished data 2016), most do ask about mental health and most do not limit questions to current illness or problems which cause impaired function.

Women have higher rates of depression and anxiety in the general population, and this is also true among women physicians.<sup>24</sup> Stigma as a barrier for seeking mental health care is pervasive in the medical training and practice environment.<sup>24-26</sup> This becomes particularly worrisome for female physicians, as this population has higher rates of suicidal ideation than male physicians, and a substantially higher suicide rate than women in the general population.<sup>8, 27, 28</sup> It is also concerning that half of our cohort believed they had at some point met criteria for mental illness but had not sought treatment. While some noted they had felt they could persevere on their own or did not have time for treatment, a large number indicated various types of stigma as reasons for not seeking help. There are now a number of evidence-based pharmacologic and non-pharmacologic treatments shown to be effective for a wide range of mental health conditions, and physicians are trained to recognize when they are indicated and to offer these to their patients. Unfortunately, our study confirmed that more than two-thirds of physicians feel reluctant to seek out these same treatments they offer their patients, for fear that they may be judged, deemed incompetent, or have their privacy and autonomy violated because of seeking help, and these beliefs crossed all age and specialty

categories. This is consistent with extensive literature noting stigma as a major barrier to seeking mental health treatment.<sup>12, 15, 26</sup> Believing one could push on without help also reflects the culture of medicine which promotes, high-functioning, self-reliance, perfectionism, and not burdening other physicians.<sup>29</sup> The finding that pediatric specialists and surgeons/ surgical specialists were significantly more likely than primary care physicians to have felt they met criteria for a mental health disorder but not sought treatment may reflect specialties which hold more strongly to this traditional medical culture. Fortunately, training programs have begun to address these issues of culture and some organizations have promoted awareness of mental health and tried to normalize treatment.<sup>30, 31</sup>

Two of every five physicians in this study who believed they had met criteria for a mental illness but had not sought treatment reported that one reason for this was that they did not ever want to have to report mental illness or treatment to a state medical licensing board. It is not known whether these licensing questions are efficacious in identifying physicians who pose potential risk to patients given that the questions are typically based on self-report and may cover prior episodes of illnesses now resolved, in remission, or under good control. There is also a wide spectrum of symptom severity and duration in any given mental health condition, so that depression could range from a single, mild, limited episode, for example postpartum depression, to a severe, chronic, life-long condition. However, the fact that physicians in this study identified licensing questions as an important factor inhibiting help-seeking is worrisome and is a unique barrier for medical professionals.<sup>29</sup> A prior study of surgeons also noted a reluctance to seek help for depression due to repercussions relating to medical licensing.<sup>28</sup> Our findings raise ethical concerns about broad requirements for mental illness disclosure given potentially serious risks to physicians who forgo needed mental health treatment out of fear of adverse consequences, even when it is not clear that such reporting offers any significant protection to patients. There are also concerns, though not raised by respondents in our study, that broad questions about mental illness which do not assess either behavior or functional impairment may violate the Americans with Disability Act.<sup>22, 29, 32</sup>

State medical licensing boards respond to reported illness in a variety of ways, ranging from requiring dates of and an explanation about illness and treatments to requests for extensive medical records, independent evaluation, monitoring, and enrollment in Physician Health Programs, sometimes as a condition of licensure. This was reflected in qualitative stories shared by our participants, and ranged from simple data requests to more traumatic and stressful experiences of extensive investigation. The reported experiences of our survey participants suggest that physicians may have reason to be fearful of licensure board reporting, given the range of reactions and requirements that can follow disclosure, and this has been previously noted in the literature.<sup>19, 33</sup> One of the key functions of a state medical board is to ensure patient safety. There is, however, no data showing that a blanket question asking about diagnosis or treatment for mental illness identifies impaired physicians. Some states do not ask about mental health at all which we believe removes stigma surrounding treatment significantly. Others ask only about “current impairment,” though it is unknown if self-report identifies the truly impaired physician.

This study is limited by being a convenience-sample survey. It reflects responses of female physicians who are active on Facebook. The group who responded to the survey is younger than the average female physician in the United States; 94% of our population was between the ages of 30-59 while a recent analysis of licensed U.S. physicians reported 70% of female physicians were aged 30-59.<sup>34</sup> Higher levels of psychological distress have been noted in younger physicians.<sup>24</sup> Our population likely reflects the demographics of individuals who use social media, with fewer older physicians; physicians younger than 30 are less likely to have children which is one of the requirements to participate. Our geographical distribution was very similar to data from the national census of physicians.<sup>34</sup> Our overall response rate is unknown, since only a fraction of the 57,000 users who were part of this Facebook group at the time of our survey are active on the site at any given time; as postings turn over quickly (pushed down the list by new postings), only active users would likely have seen at least one of the survey invitations. The group does not require personal or demographic data to join, so we cannot compare responders and non-responders or look at response

bias other than comparing our responses to national demographic data. This is a limitation for research using Facebook sampling.

Our cohort also focuses on women who identify as mothers, so this might affect responses.

However, the impact of parenting on rates of depression is quite complex and having children does not appear to have an overall mental health benefit or penalty for parents. One study of the National Survey of Family Growth found no difference in rates of current depression among women with and without children, even comparing women at different life phases.<sup>35</sup> In contrast, a study of American surgeons noted a lower rate of suicidal ideation for physicians with children. Having work-home conflicts is also associated with higher rates of burnout, so this may be a more important factor than whether or not children are present.<sup>36</sup> Additionally, while our study focused on female physicians, the presence of mental health questions on state medical licensing applications, under-treatment of personal mental health problems, and stigma affect both men and women.<sup>15, 26, 37</sup>

This study emphasizes the critical role of stigma in deterring treatment for physicians affected by mental illness. The data also raise serious concerns about how questions on medical licensing applications and physician beliefs about the negative consequences of reporting may contribute to this stigma and reluctance in help-seeking. Given increasing legal concerns about broad questions regarding mental health on professional licensing exams, and the wide variation among state boards as to what they ask and how they manage positive responses, we assert that it is time for a re-examination of how physicians are assessed for fitness to practice with respect to mental health. We also need more research on how to reduce stigma about mental health treatment for physicians<sup>38</sup> as more than two-thirds of those who avoided treatment noted a reason associated with stigma. We commend those few institutions who have instituted suicide prevention and depression awareness programs.<sup>39, 40</sup> Institutions, training programs, and practices should emphasize the importance of wellness including discussion of anxiety and depression, provision of resource lists for physicians, and time set aside for wellness or personal activities. States need to identify a consistent set of

questions about physician impairment which identify high-risk physicians and then provide them with supportive care in a safe and non-punitive way.

ACCEPTED MANUSCRIPT



Table 1: Demographics (n=2109)

<u>Age Categories</u>	<u>n (%)</u>
25-29	23 (1)
30-34	492 (23)
35-39	774 (37)
40-44	471 (22)
45-49	148 (7)
50-54	55 (3)
55-59	33 (2)
60+	19 (1)
Missing data	94 (5)
<u>Specialty*</u>	
Primary care	895 (42)
Adult medical specialty	185 (9)
Pediatric medical specialty	91 (4)
Surgery or surgical specialty	658 (31)
Other specialty	168 (8)
Missing data	112 (5)

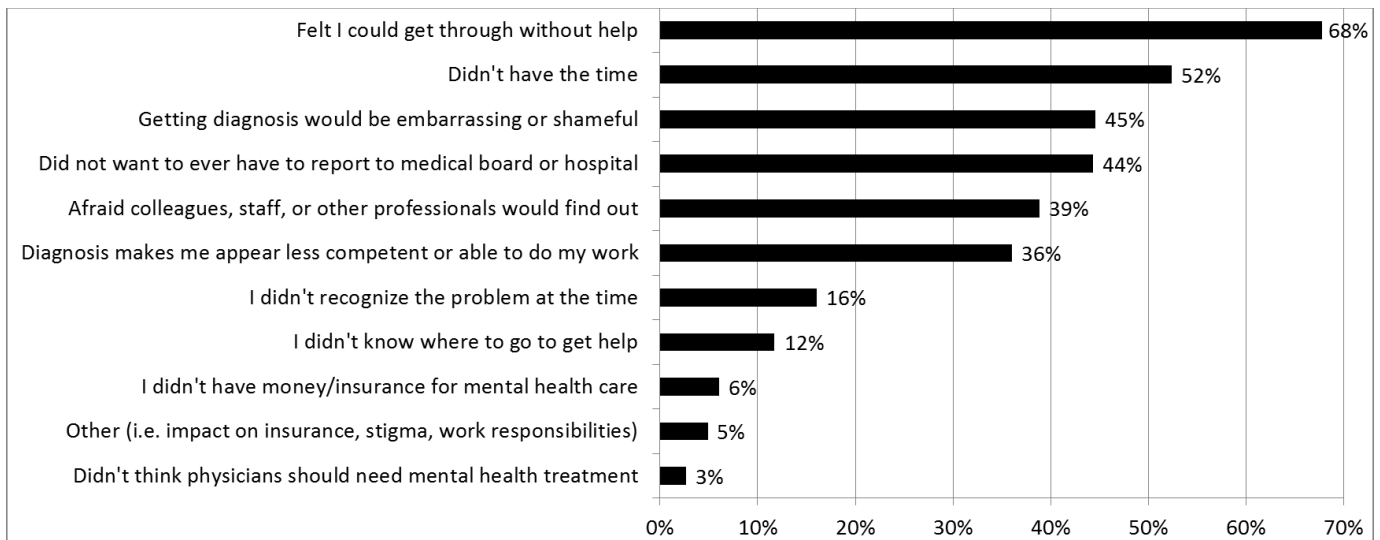
**\*Primary care** (i.e. adolescent medicine, family medicine, general internal medicine, general pediatrics, and geriatrics).

**Adult medicine specialty** typically requires a residency in internal medicine prior to fellowship (i.e. allergy, cardiology, critical care, endocrinology, genomics, gastroenterology, hematology-oncology, infectious diseases, medical genetics, nephrology, oncology, pulmonology, and rheumatology).

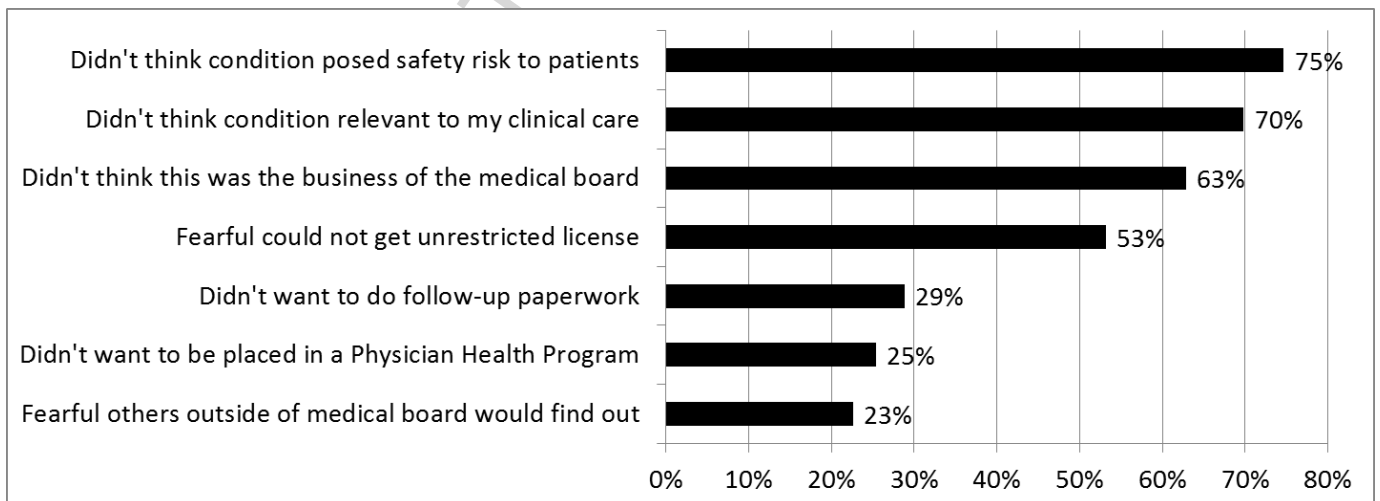
**Pediatric medical specialty** similar to above but typically requires a residency in pediatrics prior to fellowship.

**Other specialty** does not typically require a full residency in internal medicine or pediatrics (i.e., anesthesiology, dermatology, emergency medicine, neurology, nuclear medicine, obstetrics & gynecology, psychiatry, pathology, physical medicine and rehabilitation, preventive medicine, and radiology, among others).

**Table 2: Reasons for not seeking treatment among women who felt they met criteria for a mental health disorder (or weren't sure but listed a reason) at any time since medical school. (n=1040) Multiple answers allowed.**



**Table 3: Reasons for not disclosing to state medical board among women reporting a mental health diagnosis or treatment at any time since medical school AND who provided a reason for not reporting. (n=288) Multiple answers allowed.**



**Table 4: Qualitative responses around themes of mental illness stigma, help-seeking and reporting.**

Theme	Representative Quotes
Substantial stigma around physician mental illness persists in medical settings	<p data-bbox="521 268 1349 331">“I have been discriminated against in a department after disclosing my history of well-treated depression to my department chief.”</p> <p data-bbox="521 359 1349 485">“I did residency in the military and when I sought treatment, I was medically discharged...I truly don't believe I would have been asked to repay [she was asked to pay back medical school tuition] if I was diagnosed with seizures or diabetes or malignancy.”</p> <p data-bbox="521 512 1382 575">“I have treated physicians who did not want me to use their insurance for billing to not have the diagnosis on their records!”</p> <p data-bbox="521 602 1390 695">“I never share my mental health history with medical professionals since I know the stigma involved. I always lie on my health intake forms and only have discussed with a psychiatrist.”</p>
Stigma has tremendous impacts on help-seeking	<p data-bbox="521 756 1365 848">“As a prior...program director saw more problems with trainees suffering...and refusing to get help due to stigma...would often wait until world was crumbling around them before getting assistance.”</p> <p data-bbox="521 875 1365 1016">“I have known many colleagues to date who have not sought help when needed due to concerns about retaliation against their licensure, credentialing, reputation, etc...in at least one case [it] contributed to suicide.”</p> <p data-bbox="521 1106 1349 1169">“I was afraid to take an antidepressant since I might have to say I have had a mental illness when applying for jobs.”</p>
State medical board reporting requirements also inhibit willingness to seek help.	<p data-bbox="521 1230 1390 1371">“The fear of losing your license to practice medicine is one of the fundamental reasons my residency classmates did not seek mental health treatment. The program for physicians with “impairment” is expensive, degrading, and time consuming.”</p> <p data-bbox="521 1461 1325 1524">“The fact that mental health disclosure exists makes physicians think twice.”</p> <p data-bbox="521 1614 1349 1677">“I know several physicians personally who refused to get mental health care exactly for this reason.”</p> <p data-bbox="521 1747 1349 1839">“These regulations prevent physicians from seeking care and increase suicide. They prevented me from seeking care and instead I quit residency.”</p> <p data-bbox="521 1929 1382 1961">“I'm VERY worried about filling out the forms next time I have to re-up my</p>

	<p>license and am seriously considering lying. Ugh.”</p> <p>“Would never want to have a mental health diagnosis on my record because of fear of licensing problems. I don’t trust the system.”</p>
--	--

ACCEPTED MANUSCRIPT

**References**

1. Dyrbye LN, West CP, Satele D, *et al.* Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Acad Med.* Mar 2014;89(3):443-451.
2. Aasland OG, Ekeberg O, Schweder T. Suicide rates from 1960 to 1989 in Norwegian physicians compared with other educational groups. *Social science & medicine (1982).* 2001;52(2):259-265.
3. Hawton K, Agerbo E, Simkin S, Platt B, Mellanby RJ. Risk of suicide in medical and related occupational groups: a national study based on Danish case population-based registers. *J Affect Disord.* Nov 2011;134(1-3):320-326.
4. Sigsbee B, Bernat JL. Physician burnout: A neurologic crisis. *Neurology.* Dec 9 2014;83(24):2302-2306.
5. Gold KJ, Sen A, Schwenk TL. Details on suicide among US physicians: data from the National Violent Death Reporting System. *Gen Hosp Psychiatry.* Jan 2013;35(1):45-49.
6. Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Acad Med.* Apr 2006;81(4):354-373.
7. Goebert D, Thompson D, Takeshita J, *et al.* Depressive symptoms in medical students and residents: a multischool study. *Acad Med.* Feb 2009;84(2):236-241.
8. Hem E, GrLnvoid NT, Aasland OG, Ekeberg O. The prevalence of suicidal ideation and suicidal attempts among Norwegian physicians. Results from a cross-sectional survey of a nationwide sample. *Eur Psychiatry.* May 2000;15(3):183-189.
9. Schwenk TL, Gorenflo DW, Leja LM. A survey on the impact of being depressed on the professional status and mental health care of physicians. *J Clin Psychiatry.* Apr 2008;69(4):617-620.
10. Schernhammer ES, Colditz GA. Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). *Am J Psychiatry.* Dec 2004;161(12):2295-2302.
11. Lindeman S, Laara E, Vuori E, Lonnqvist J. Suicides among physicians, engineers and teachers: the prevalence of reported depression, admissions to hospital and contributory causes of death. *Acta psychiatrica Scandinavica.* 1997;96(1):68-71.

12. Schwenk TL, Davis L, Wimsatt LA. Depression, stigma, and suicidal ideation in medical students. *JAMA*. Sep 15 2010;304(11):1181-1190.
13. Davidson SK, Schattner PL. Doctors' health-seeking behaviour: a questionnaire survey. *Med J Aust*. Sep 15 2003;179(6):302-305.
14. Mackenzie CS, Erickson J, Deane FP, Wright M. Changes in attitudes toward seeking mental health services: a 40-year cross-temporal meta-analysis. *Clin Psychol Rev*. Mar 2014;34(2):99-106.
15. Clement S, Schauman O, Graham T, *et al*. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychol Med*. Jan 2015;45(1):11-27.
16. Balon R. Psychiatrist attitudes toward self-treatment of their own depression. *Psychother Psychosom*. 2007;76(5):306-310.
17. Montgomery AJ, Bradley C, Rochfort A, Panagopoulou E. A review of self-medication in physicians and medical students. *Occup Med (Lond)*. Oct 2011;61(7):490-497.
18. Schroeder R, Brazeau CMLR, Zackin F, *et al*. Do state medical board applications violate the americans with disabilities act? *Academic medicine : journal of the Association of American Medical Colleges*. 2009;84(6):776-781.
19. Miles SH. A piece of my mind. A challenge to licensing boards: the stigma of mental illness. *JAMA*. Sep 9 1998;280(10):865.
20. Peyser HS. Self-incrimination on medical board and licensing applications. *Hosp Community Psychiatry*. Jun 1993;44(6):517.
21. Appelbaum PS. Step up to the bar: avoiding discrimination in professional licensure. *Psychiatr Serv*. Apr 1 2015;66(4):340-342.
22. Schroeder R, Brazeau CM, Zackin F, *et al*. Do state medical board applications violate the americans with disabilities act? *Acad Med*. Jun 2009;84(6):776-781.
23. Polfliet SJ. A national analysis of medical licensure applications. *The journal of the American Academy of Psychiatry and the Law*. 2008;36(3):369-374.

24. beyondblue Doctors' Mental Health Program. *National Mental Health Survey of Doctors and Medical Students*. Victoria, Australia 2013.
25. Dyrbye LN, Eacker A, Durning SJ, *et al*. The Impact of Stigma and Personal Experiences on the Help-Seeking Behaviors of Medical Students With Burnout. *Acad Med*. Jul 2015;90(7):961-969.
26. Wimsatt LA, Schwenk TL, Sen A. Predictors of Depression Stigma in Medical Students: Potential Targets for Prevention and Education. *Am J Prev Med*. Nov 2015;49(5):703-714.
27. Petersen MR, Burnett CA. The suicide mortality of working physicians and dentists. *Occup Med (Lond)*. Jan 2008;58(1):25-29.
28. Shanafelt TD, Balch CM, Dyrbye L, *et al*. Special report: suicidal ideation among American surgeons. *Arch Surg*. Jan 2011;146(1):54-62.
29. Jones JTR. "High functioning": Successful professionals with severe mental illness. *Duke Forum for Law & Social Change*. 2015;7(1):1-35.
30. Ward S, Outram S. Medicine: in need of culture change. *Intern Med J*. Jan 2016;46(1):112-116.
31. Daskivich TJ, Jardine DA, Tseng J, *et al*. Promotion of Wellness and Mental Health Awareness Among Physicians in Training: Perspective of a National, Multispecialty Panel of Residents and Fellows. *J Grad Med Educ*. Mar 2015;7(1):143-147.
32. Walker YN. Protecting the public. The impact of the Americans with Disabilities Act on licensure considerations involving mentally impaired medical and legal professionals. *J Leg Med*. Dec 2004;25(4):441-468.
33. Hendin H RC, Fox D, Altchuler SI, Rodgers P, Rothstein L, Rothstein M, Mansky P, Schneidman B, Sanchez L, Thompson JN. Licensing and physician mental health: problems and possibilities. *J Med Licensure and Discipline*. 2007;93(2):6-11.
34. Young A, Chaudhry HJ, Thomas JV, Dugan M. A census of actively licensed physicians in the United States, 2012. *J Med Regulation*. 2013;99(2):11-24.
35. Umberson D, Pudrovskaya T, Reczek C. Parenthood, Childlessness, and Well-Being: A Life Course Perspective. *J Marriage Fam*. Jun 2010;72(3):612-629.

36. Shanafelt TD, Balch CM, Bechamps G, *et al.* Burnout and medical errors among American surgeons. *Ann Surg.* Jun 2010;251(6):995-1000.
37. Susukida R, Mojtabai R, Mendelson T. Sex Differences in Help Seeking for Mood and Anxiety Disorders in the National Comorbidity Survey-Replication. *Depress Anxiety.* Nov 2015;32(11):853-860.
38. Center C, Davis M, Detre T, *et al.* Confronting depression and suicide in physicians: a consensus statement. *JAMA.* Jun 18 2003;289(23):3161-3166.
39. Haskins J, Carson JG, Chang CH, *et al.* The Suicide Prevention, Depression Awareness, and Clinical Engagement Program for Faculty and Residents at the University of California, Davis Health System. *Acad Psychiatry.* Feb 2016;40(1):23-29.
40. Moutier C, Norcross W, Jong P, *et al.* The suicide prevention and depression awareness program at the University of California, San Diego School of Medicine. *Acad Med.* Mar 2012;87(3):320-326.