



<https://doi.org/10.1016/j.jemermed.2019.06.034>

Clinical Review

MEDICINE'S SHAME PROBLEM

Jennifer J. Robertson, MD, MSED* and Brit Long, MD†

*Emory University School of Medicine, Atlanta, Georgia and †Brooke Army Medical Center, Fort Sam Houston, Texas

Reprint Address: Jennifer J. Robertson, MD, MSED, Emory University School of Medicine, 80 Jesse Hill Jr Drive SE, Steiner Building, Atlanta, GA 30303

Abstract—Background: Physician mental health is an increasingly discussed topic. Despite the progress made regarding the discussion of physician mental health, these issues remain concerning. In particular, the discussion as to why these issues are so problematic remains limited. Contributors can include bullying, the “hidden curriculum” of medicine, how the medical culture handles errors, and importantly, shame. **Objective:** This narrative review evaluates the literature on bullying and abuse in medicine, how abuse can exacerbate shame, how the handling of medical errors can exacerbate shame, how shame can negatively affect mental health, and how the medical community and leaders can mitigate these issues. **Discussion:** Physician mental health remains an important issue. Job-related stressors, bullying, medicine’s hidden curriculum, medical error, traumatic patient encounters, and perfectionism can contribute to physician depression and burnout. Shame may underlie these factors. Shame is a universal emotion that leads to poor self-esteem, depression, eating disorders, abuse, and addiction. However, shame can be addressed and overcome, especially via acknowledgment, vulnerability, and empathy. The medical community can provide some of these techniques by encouraging environments of kindness and respect, giving constructive rather than destructive feedback, providing empathy and support after a medical error, and encouraging mutual learning environments where questions are asked with respect in order to enhance learning. This is opposed to hierarchies and “pimping,” where questions are asked with intimidation and disrespect. **Conclusions:** Shame is likely a contributor to physician mental health issues. For shame resilience to occur, it must not be kept secret and mutual support should be provided. By addressing the possible causes behind physi-

cian mental health concerns, including shame, more solutions can be proposed. © 2019 Elsevier Inc. All rights reserved.

Keywords—shame; depression; bullying; resilience; culture; error

INTRODUCTION

Many enter medical school with a desire for an intellectually invigorating and valuable profession, while also caring for patients. However, studies have demonstrated that mental health, life satisfaction, and even confidence decline through medical school, training, and practice (1–10). Recently, a Medscape survey of 189 medical students found that 50% of students felt their self-confidence or self-esteem had decreased during medical training. In addition, of the 1123 physicians who responded, 46% noted a decrease in self-confidence or self-esteem after medical school and residency training (8). Of those who reported this decrease, some said that their educational experiences had contributed to chronic mental health issues (8). Another author found that up to 80% of medical students reporting moderate to severe depression in medical school had no history of depression or treatment, and another study of medical students found that suicidal thoughts increased during the year of evaluation (11,12). Interestingly, job problems have been found to contribute more to physician suicides compared to the general population. In a study of

31,636 suicide victims, of which 203 were physicians, the physicians who committed suicide were more like to have job problems contribute, rather than other social problems. This contrasted with the general population, who were more likely to commit suicide after a recent death of a friend or family member (13).

While we want confident and happy physicians, physicians have higher suicide rates than the general population and even the military (14,15). Several articles have found that risk factors for suicide in physicians include mental illness, such as depression; female gender; financial strain; personality; single marital status; job stress; and litigation stress, among other negative life events (12,13,16–19). Given that depression is a strong risk factor for suicide, authors have called for solutions, such as routine depression screenings (19–23). In addition, initiatives to promote wellness have been suggested, including confidentiality safeguards, education programs and summits, work-hour changes, and other various wellness programs to protect physician mental health (18,23,24). Despite the numerous calls for prevention and treatment protocols, physician suicide remains an issue (15,19,25). Sadly, according to one author, there is “no evidence that an improvement or resolution (to physician suicide) is in sight” (25).

The Problem as an Answer to the Solution

Only recently has physician wellness become an important issue for the Accreditation Council for Graduate Medical Education (ACGME). In 2017, the ACGME revised a section of common program requirements for all accredited residency and fellowship programs to address well being “more directly and comprehensively” (26). In addition, just last year, in 2018, the Council of Emergency Medicine Residency Directors, in collaboration with multiple societies, came together to annually dedicate the third Monday in September as National Physician Suicide Awareness Day (27).

While generally discussing and promoting physician wellness is important, many individual risk factors for depression and suicide are difficult to prevent, such as gender, life stress, moments of crisis, and physical illness (16,28–31). In terms of more specific risk factors in the medical culture, harassment, post-traumatic patient encounters, shaming after medical error, and the hidden curriculum of teaching by shaming can contribute to poor self-confidence and depression (1,9,25,32–50). In addition, shame is an emotion that has been found to be associated with depression and poor mental health (51–56). While there is limited evidence directly correlating shame with suicide, depression is a significant risk factor for suicide (20–22). Depression in physicians is also associated with greater risk for attempting and completing suicide (13,19).

While the issues of workplace bullying, shame, and poor mental health have been addressed in non-medical settings, literature solely addressing bullying and shame in medicine is limited (57,58). This narrative review evaluates the culture of abuse in medicine, how abuse can exacerbate shame and how shame can negatively affect mental health, how the handling of medical error can exacerbate shame, and how the medical community can come together to make positive changes to the system and help mitigate these issues.

METHODS

The authors conducted a search of Google Scholar and PubMed for articles evaluating the following keywords and phrases: *physician depression, physician suicide, medical error, shame, bullying and abuse in medicine, shame in medicine, impact of shame, and shame resilience*. Authors included case reports and series, retrospective and prospective studies, systematic reviews and meta-analyses, narrative reviews, and commentaries, and decided which studies to include by consensus. As this is a narrative review and not a systematic review or meta-analysis, authors did not pool data for analysis.

A portion of the discussion is based on well-renowned researcher Dr Brené Brown’s grounded theory research on shame. Her research has dominated the literature and provided great insights into the impact of shame on individuals and cultures and how individuals may become more shame resilient through empathy and vulnerability.

DISCUSSION

The Importance of Shame

Shame is an emotion we all face. Shame is defined as an “intensely painful feeling or experience of believing we are flawed and therefore unworthy of acceptance and belonging” (59). Shame is different from guilt. In guilt, we judge our behavior to be wrong, while in shame, we feel that our whole self is no good, inadequate, or unworthy (59). To feel shame, one has to compare one’s behavior against standards in which one has come to believe as a result of socialization (60). It is important to note that shame is person-specific, and there are no known “classic” shame-inducing situations (61).

Overall, shame makes one feel inferior to others and generates a desire to hide or disappear (58,60,62). Importantly, research has shown a link between shame and depressive thoughts and depression (51–55,63,64). For example, in a study of college students, indices of depression were positively related to tendencies to experience shame (55). This contrasts with guilt, where depression was negligibly related. Similarly, in another study by Orth and colleagues,

the authors investigated event-related shame, event-related rumination, and depression among 149 individuals undergoing family breakup (52). The authors found that shame, but not guilt, had a strong, unique effect on depression. There are limited empiric data that directly correlate shame with suicide. However, shame has been found to be associated with depression, which is a known strong risk factor for suicide (13,20–22).

Doctors may be particularly vulnerable to shame, as they are self-selected for perfectionism (65). Perfectionism can push physicians to excel and improve their care. However, perfectionism can also trigger shame in individuals who experience failure (66). Due to their trend toward perfectionism, doctors may be more susceptible to shame when they feel they do not meet the ideal standard or when others judge or criticize them (63). Often, shame involves imagining a disapproving audience and the exposure of self and its flaws. Feelings of shame involve a desire to escape further condemnation (64).

Besides underlying perfectionism and feeling shame after failure, various other aspects of the medical culture may exacerbate shame in physicians and will remain the focus of this review. Some of these aspects include how the medical culture handles errors, bullying and abuse, the hierarchical culture of medicine, and the hidden curriculum of teaching by shaming (53,63,67–73). As opposed to bullying, blame, and shame, there are better ways that the medical culture could handle teaching and errors, and several strategies will be discussed in the next section.

The Bullying Problem

Bullying is defined as any interaction that consists of repetitive intimidation, harassment, humiliation, aggression, emotional abuse, or psychological mistreatment (74). While bullying comprises a wide variety of examples, it includes any degrading or offensive behavior that undermines the confidence and self-esteem of the recipient, such as threats to professional status, isolation, overwork, or destabilization (75,76). A few examples or signs of bullying may include “persistent attempts to belittle and undermine one’s work, persistent unjustified criticism and monitoring of one’s work, humiliating one in front of colleagues, destructive innuendo and sarcasm, making inappropriate jokes or persistent teasing, withholding necessary information, setting impossible deadlines, discriminating based on race or gender, and even physical violence” (77). Studies have shown that there are certain variables that predict workplace bullying, including excessive workload, role conflict and ambiguity, lack of coworker support, and a competitive work environment, all of which can be seen in the medical workplace (74). Some particular risk factors for being a victim of abuse in medicine are female

gender, racial minority, and being a trainee in a surgical training program (32,39,78).

The Pervasive Nature of Bullying in Medicine

Abusive behavior in the medical culture is not new (1,36,37,79). In 1982, Silver presented this issue when he compared medical students’ outlooks before and after enrolling in medical school (1). He noted that some students went from being “enthusiastic and excited” to “frightened, depressed and frustrated” over the course of their training. Silver also proposed that abuse may simply be a part of medical training and a requirement of becoming a physician.

Unfortunately, medical students are not the only ones who are abused. Several studies have noted abuse of residents and fellows by not only faculty physicians, but other residents as well (25,38–41,78,80–82). Unfortunately, abuse toward physicians has persisted and has been mentioned in recent articles in the last few years (32,41,83). While most articles focus on the abuse of trainees, there has been some attention on the bullying and harassment of more senior physicians by both patients and other physicians (42,84,85). Additionally, no trainee or physician is immune to the potential blame and shame from others that can occur as a result of an unintentional medical error (44,69,70). Medical education studies suggest that intimidation and harassment are not isolated events, but rather part of a pervasive cycle that is endemic among all levels of training and practice (36,37).

In a 2006 study by Frank et al., 2300 medical students around the United States were asked about their experiences of harassment and belittlement during their medical training (49). Among the fourth-year medical students, 42% reported harassment and 84% experienced belittlement during some part of medical school. Most of the harassment and belittlement came from residents, followed by clinical professors and then patients (49). In another study of third-year medical students, more than half of students reported at least one type of abuse, but the most common types of abuse included verbal and power mistreatment. Verbal mistreatment was defined as being “yelled or shouted at, called a derogatory name, cursed, ridiculed,” while power mistreatment was defined as being “made to feel intimidated, dehumanized, or threatened” (35). Over a 9-year period, 38% reported verbal mistreatment and 21% power mistreatment (35). Other studies have shown similar types of mistreatment in residents and fellows, with one study finding that out of 196 emergency medicine residents, 86% reported some type of verbal abuse and 65% experienced verbal threats (39). Bullying is also not limited to medical culture in the United States, as studies from other countries have demonstrated similar findings (33,77,83).

Table 1. Shame Resilience Techniques for Individuals and Leaders

Shame Resilience for Individuals	How Leaders Can Help Develop Shame Resilience in Their Workers
<p>Recognize and discuss shame openly.</p> <p>Share your story with those who deserve to hear it.</p> <p>Share your story with those who care for you not despite your vulnerabilities, but because of them. Consider joining a small group.</p> <p>Practice self-compassion; talk to yourself in a way you would talk to someone who you love and respect.</p> <p>Recognize your self-worth is not tied to your accomplishments.</p>	<p>Lead not by shaming but by vulnerability and connection.</p> <p>Teach that failure is learning.</p> <p>Hold those who fail accountable, but forgive and understand that failure is human.</p> <p>Lead by teaching others that their self-worth is not tied to their accomplishments.</p> <p>Lead by showing your own human side.</p>

While the most common form of abuse seems to be verbal, other forms of abuse in medicine are important and deserve mention (32,35,39,41). These include physical assault and sexual harassment (43,78,81,85–87). Physical abuse does commonly come from patients or their family members, and it is more commonly seen in psychiatric settings and emergency departments (43,81,85–87). However, a few studies have mentioned physical assault in physicians by other physicians. In a survey of 186 residents in 7 residency programs, 5.4% of female residents reported assault by male supervising physicians (78). In another survey of 196 family practice physicians, 6% were physically assaulted by other health care personnel, and 2% were physically assaulted by the person to whom they report (86).

Sexual harassment is also a problem in medicine. While males in medicine do experience sexual harassment, it has been shown that female physicians and medical students are the predominant victims (32,78,81,88–90). In a survey of 82 internal medicine residents, 24 (73%) women and 11 (22%) men reported sexual harassment at least once in their training (90). In a larger study of 1277 second-year residents, 63% of the females and 15.3% of males reported at least one episode of sexual harassment or discrimination during training (81). More recent studies reveal that this is a persistent issue for male and female medical students, residents, and attending physicians alike (39,88,89).

Bullying after Medical Error

Bullying in the form of blame, shame, and abandonment after perceived failure or an unintentional medical error can also be difficult for physicians and contribute to emotional distress (44,69,70). The medical culture

places emphasis on perfection and, unfortunately, after an error occurs, the medical profession has traditionally utilized a method of blame and shame. By doing so, many physicians often feel unworthy and incompetent (69–71). This can be seen through malignant peer review processes, morbidity and mortality conferences, or even via “pimping,” where questions are asked in a disrespectful manner in order to intimidate learners. This differs from teaching and asking learners questions with respect in order to enhance education.

In a culture that does not tolerate failure, perfectionistic physicians may have the tendency to fear failure and experience shame (72). Authors have demonstrated that individuals who fear or experience failure tend to be more shame prone and suffer from mental illness (72,91). In a study of completed suicides, one author estimated that about one-third of suicide victims had experienced shame from failure (62). If shame is not coupled with shame-resilience methods, it may be a contributing factor toward mental health issues, such as depression (54,55,59,64).

Abuse as a Shame Trigger

Any form of abuse, including verbal abuse, sexual harassment, and physical assault, can contribute to shame and poor mental health (58,62,67,92–96). According to Dr Brené Brown’s research, blaming, name-calling, and harassment are a few of many behavioral cues that shame has permeated a culture (97). Unfortunately, using this definition, given the many articles that document the past and continued bullying in medicine, the medical culture possesses a culture of shame.

Because verbal harassment is the most common form of abuse in the medical workplace, it is an important contributor to shame in learners and physicians (32,35,39,41). In a qualitative study of 15 university academic faculty members who were verbally bullied at work, several mention feelings of shame, including “wanting to hide,” “feeling inferior,” “losing control,” and being “left scarred” (58). Similarly, in a study of 20 bully victims, participants described significant shame, depression, anxiety, and fear due to the verbal abuse at work (98). In another study of 48 workers, authors found a significant association between bullying and anxiety and depression. Of note, 90% of the participants had no clinical history of a psychiatric disorder (99). Other studies have noted similar associations between workplace bullying and psychiatric comorbidities (100,101).

Bullying in Medical Education

While the bully may be motivated by a desire to improve one’s performance, especially in medicine, their intentions are irrelevant, and the definition of bullying remains the

same (40). Bullying and shaming are ways that some find to be useful teaching tools, despite studies demonstrating these are dysfunctional and harmful (80,102). Medicine has traditionally relied upon power hierarchies, pimping, and occasionally asking questions in a manner that leads to humiliation (32,103,104). This can lead to a shame response in learners, which can impede growth by discouraging engagement with the learning process (97,105,106). Leisy and Ahmad describe that in medicine, it is a cultural problem where mistreatment exists due the “cyclical nature and the existing culture of medical training” (41). Physicians of higher status feel they can bully ones of lower status simply because of their roles in the hierarchy (41). This in part comprises the “hidden curriculum,” which is the conscious or unconscious values passed on to students by faculty and older trainees (73). This hidden curriculum can be positive, such as teaching respect, honesty, integrity, and compassion (107). However, negative aspects, such as dehumanization, abuse of power, and inappropriate comments, can also be passed to trainees (103,107–109). A physician who is constantly having to navigate and avoid shame may be more likely to pass it down to others (97). According to Brainard and Brislen, the biggest barrier to medical professionalism education is “unprofessional conduct by educators, which is protected by the established hierarchy of academic authority” (110).

Illuminating the Problem of Shame

Dr Brené Brown is a prominent researcher in shame, vulnerability, and shame resilience. From years of her grounded theory research, she has discovered that part of shame resilience occurs by first addressing that shame exists for all (59). Unfortunately, shame tends to seek secrecy, and most do not want to discuss shame (97,111). However, the less we discuss shame, the more control it has (97). Keeping shame in the dark leads to feelings of helplessness, reduced well being, and decreased shame resilience (59,97,112). Continuing to seek secrecy is, thus, not the suggested solution for coping with shame. Rather, recognizing shame and discussing the problem and providing empathy are vital solutions (59,97).

Solutions: Empathy

The process of eliminating bullying in any individual medical environment is beyond the scope of this article. However, initial steps toward improvement may occur by acknowledging that shame and bullying exist in the medical environment. Besides acknowledging that shame exists, empathy can be a powerful way to combat shame (59). In many ways, shame is the result of feeling alone, powerless, and isolated (59). One may feel like he or she is the “only one” who makes an error, alone and power-

less when abuse occurs, or alone in a system where one is constantly fighting to compete and survive. Empathy is being able to see a situation from another person's perspective and truly feel and relate to what the other is experiencing (59). While the most powerful empathy comes from another person(s), empathy can also include self-empathy (59). Empathy has four defining attributes including: 1) being able to see the world as others see it, 2) being non-judgmental, 3) understanding another person's feelings, and 4) communicating understanding of that person's feelings (113).

Empathy also comprises support. Encouraging a culture of kindness and respect, not only in the learning environment but also among physicians in the work environment, is a potential solution (59,84). Medical leaders and peers should not only learn to recognize bullying and abuse, but also find ways to respond and provide empathy and support to the bullied individual(s), which will improve shame resilience (59,112).

Shame can be intense in learners, specifically as a result of making a mistake, undergoing mistreatment, or experiencing humiliation (104,105). Educators are in an important position to provide empathy by reframing failure as learning (114). Failure is part of the learning process, and teachers can lessen the shame response by acknowledging we are all human, that failure is a part of learning, and providing constructive feedback (105,114). The substance and focus of feedback are important in determining the learner's response and feedback effectiveness. Studies have shown that constructive feedback is more effective than destructive feedback (115–117). According to one author, constructive feedback is specific, considerate, and does not attribute poor performance to internal causes, such as personality (117). Destructive feedback focuses on the self rather than actions, which can lead to decreased self-efficacy, lowered goals, increased avoidance, and higher rates of quitting a task (116,117). In some ways, these actions are part of the shame response. Shame is a response to self as bad, rather than a bad action (guilt) (59). Thus, it would make sense that feedback that is focused on the self has the potential to induce shame, whereas feedback focused on actions is more likely to induce reflection and corrective action (105,118).

Instead of the hierarchical structure of medicine, it may be more useful to see each other as people first (114). The environment of medicine is one of constant learning on all levels and in all specialties. Thus, we can learn every day from one another, develop mutual understanding, and provide empathy when a failure occurs (114). Long term, if medical educators can learn to understand the shame response, provide empathy, and give constructive rather than destructive feedback, learners may experience less shame and improved learning.

Empathy after Medical Error

Empathy can also be applied to how the medical culture handles errors. Physicians may respond to failure in clinical practice with shame. Instead of responding with guilt (“I practiced badly”), some doctors respond with shame (“I am a bad doctor”) (119). As mentioned previously, shame seeks secrecy and leads to more avoidance, instead of facing the issue and obtaining a solution. Unfortunately, the medical culture tends to promote this secrecy, rather than providing empathy and support (46). Without proper support after failure or perceived failure, physicians may suffer from shame, loss of confidence, anxiety, depression, and reduced job satisfaction (120).

Just as Dr Brené Brown mentions that shame resilience is improved by empathy and connection, physicians have also noted that communication and interaction with colleagues and supervisors are perceived to be the most helpful resources after a medical error (120). Thus, empathy and connection are imperative toward shame resilience after a medical error. Failure is a learning opportunity, rather than an opportunity for shaming (97,114).

Dr Brown provides several useful steps when one feels shame after failure or error (97):

1. Practice courage and reach out. Share your experience with someone who has earned the right to hear it.
2. Talk to yourself the way you would talk to somebody you care about. For example, “You are human—we all make mistakes.” During a shame attack, many times we talk to ourselves in ways we would never talk to people we love. Learn to be self-compassionate.
3. Own your story. Do not bury it, do not let it fester or define you.

Leading with Vulnerability and Combating Shame

Physicians are educators and leaders; however, shame reduces innovation and creativity. If individuals fear shame because of being wrong or speaking up, then they stop taking risks that may help move an organization forward (97). If leaders manage others by shame or fear, or expect perfection in their workers, then innovation and creativity in an organization will be limited (97,121). Individuals will be less engaged, as they will fear speaking up.

To improve and drive creativity and learning, leaders should “re-humanize” education and work. This involves two major concepts: 1) recognizing and combating shame and 2) engaging with vulnerability. By definition, vulnerability is “the quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally.” Contrary to what many believe, vulnerability does not mean weakness. It does not mean one will be harmed, but rather, it means that one is open and honest

and is putting him- or herself “on the line.” According to Dr Brown, vulnerability is “uncertainty, risk and emotional exposure” (97). Thus, vulnerability reflects being authentic and having the courage to be yourself (97,121–123).

In the medical culture of hierarchies, perfectionism, fear of being wrong and medical error, and shame, vulnerability is rare (41,70,109,122). The problem with perfectionism is that it can counter growth, risk, learning, and innovation (97,121). Perfectionism leads to fear, a “cover-your-rear-end culture,” finger pointing, and failure to execute (121). Fear is a short-term motivator and can create a punishing environment (97,121). In terms of hierarchies, when leaders confuse roles with true selves, titles dominate. Leaders are often taught to keep a distance and project an authoritative image. However, when one tries to appear perfect or strong to be respected by others, the opposite of the intended effects can occur (123). Perfectionism and fear tends to de-humanize work (97). However, leaders who are human first, are vulnerable and authentic, lead without shame and fear, and promote collective learning tend to have less fearful and more engaged workers (97,114,121–123).

Examples of vulnerability may include calling an employee or colleague whose child is sick, asking someone for help, and taking responsibility for an error that may have occurred at work (123). Another important example of vulnerability is forgiveness (123,124). Research has demonstrated that a culture of forgiveness in organizations leads to increased worker productivity and less voluntary turnover (124). If leaders are authentic and vulnerable, they are viewed as more trustworthy. Workers feel valued and may share ideas for improvement (123). In an organization where respect and dignity of human beings are seen as the highest values, shame and blame do not work as management styles. Dr Brown mentions that the four best strategies for leaders to help build shame-resilient cultures include (97):

1. Leaders who are supportive and willing to facilitate honest conversations about shame and cultivate shame-resilient cultures.
2. Facilitate efforts to see where shame might be functioning in organizations and how it might creep into the ways we engage with others.
3. Leaders who normalize common struggles and share their own experiences.
4. Leaders who train employees on the differences between shame and guilt and teach them how to give and receive feedback in ways that foster growth and engagement.

Putting it All Together

Shame is associated with mental health disorders, including depression (52,54,55). In addition, shame is a

leading cause of disengagement. According to Dr Brown, shame can only rise so far in a system before people disengage to protect themselves (97). By understanding this, physicians and leaders can start to understand, recognize, and discuss shame (Table 1). Standing against bullying and abuse, avoiding shaming after medical error or other failures, leading with vulnerability/showing our human side, providing constructive rather than destructive feedback to learners, and importantly, providing empathy toward one another, are important solutions. These steps can reduce bullying and shame and many even decrease levels of physician depression. Given that depression is a primary risk factor for suicide, perhaps empathy and vulnerability would be protective against suicide as well (20,22,59).

CONCLUSIONS

The discussion of physician mental health and suicide is becoming more prevalent in the academic literature and lay press. Shame is not a subject the medical field discusses often and yet it is a universal human emotion. It has been associated with mental health issues, including depression and suicide. Shame can be exacerbated by abuse and bullying, disconnection, and lack of support, but most importantly, it is exacerbated by silence. Discussion of bullying and potential solutions among health care professionals is vital. The medical community must unite to modify and improve the way we teach, mentor, and interact with our colleagues.

REFERENCES

1. Silver HK. Medical students and medical school. *JAMA* 1982;247:309–10.
2. Rosal MC, Ockene IS, Ockene JK, et al. A longitudinal study of students' depression at one medical school. *Acad Med* 1997;72:542–6.
3. Guthrie EA, Black D, Shaw CM, et al. Embarking upon a medical career: psychological morbidity in first year medical students. *Med Educ* 1995;29:337–41.
4. Aktekin M, Karaman T, Senol YY, et al. Anxiety, depression and stressful life events among medical students: a prospective study in Antalya, Turkey. *Med Educ* 2001;35:12–7.
5. Parkerson JG, Broadhead WE, Tse CK. The health status and life satisfaction of first-year medical students. *Acad Med* 1990;65:586–8.
6. Kjeldstadli K, Tyssen R, Finset A, et al. Life satisfaction and resilience in medical school—a six-year longitudinal, nationwide and comparative study. *BMC Med Educ* 2006;6(1):48.
7. Hooke R. Low self-esteem in GP registrars. *BMJ* 2006;332(7555):gp239–40.
8. Wible PL. Why so many doctors lack self-confidence, and how to get it back. 2015. Available at: <https://www.medscape.com/viewarticle/849481>. Accessed October 19, 2018.
9. Schuchert MK. The relationship between verbal abuse of medical students and their confidence in their clinical abilities. *Acad Med* 1998;73:907–9.
10. West CP, Shanafelt TD, Kolars JC. Quality of life, burnout, educational debt, and medical knowledge among internal medicine residents. *JAMA* 2011;306:952–60.
11. Schwenk TL, Davis L, Wimsatt LA. Depression, stigma, and suicidal ideation in medical students. *JAMA* 2010;304:1181–90.
12. Tyssen R, Vaglum P, Grønvoold NT, et al. Suicidal ideation among medical students and young physicians: a nationwide and prospective study of prevalence and predictors. *J Affect Disord* 2001;64:69–79.
13. Gold KJ, Sen A, Schwenk TL. Details on suicide among US physicians: data from the National Violent Death Reporting System. *Gen Hosp Psychiatry* 2013;35:45–9.
14. Stack S. Suicide risk among physicians: a multivariate analysis. *Arch Suicide Res* 2004;8:287–92.
15. Anderson P. Doctors' suicide rate highest of any profession. 2018. Available at: <https://www.webmd.com/mental-health/news/20180508/doctors-suicide-rate-highest-of-any-profession#1>. Accessed May 12, 2019.
16. Sansone RA, Sansone LA. Physician suicide: a fleeting moment of despair. *Psychiatry (Edgmont)* 2009;6:18–22.
17. Fink-Miller EL, Nestler LM. Suicide in physicians and veterinarians: risk factors and theories. *Curr Opin Psychol* 2018;22:23–6.
18. Andrew LB, Brenner BE. Physician suicide. *Medscape Drugs Dis* 2015.
19. Eckleberry-Hunt J, Lick D. Physician depression and suicide: a shared responsibility. *Teach Learn Med* 2015;27:341–5.
20. Angst J, Angst F, Stassen HH. Suicide risk in patients with major depressive disorder. *J Clin Psychiatry* 1999;60(suppl 2). discussion 75–6, 113–6.
21. Brown GK, Beck AT, Steer RA, et al. Risk factors for suicide in psychiatric outpatients: a 20-year prospective study. *J Consult Clin Psychol* 2000;68:371–7.
22. Cavanagh JT, Carson AJ, Sharpe M, et al. Psychological autopsy studies of suicide: a systematic review. *Psychol Med* 2003;33:395–405.
23. Center C, Davis M, Detre T, et al. Confronting depression and suicide in physicians: a consensus statement. *JAMA* 2003;289:3161–6.
24. Wallace JE, Lemaire JB, Ghali WA. Physician wellness: a missing quality indicator. *Lancet* 2009;374(9702):1714–21.
25. Myers MF. Abuse of residents: it's time to take action. *CMAJ* 1996;154:1705–8.
26. Accreditation Council for Graduate Medical Education. Improving physician well-being, restoring meaning in medicine. Available at: <https://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being>. Accessed May 21, 2019.
27. Council of Residency Directors in Emergency Medicine. National physician suicide awareness day. 2018. Available at: <https://www.cordem.org/npsa>. Accessed May 21, 2019.
28. Nolen-Hoeksema S. Gender differences in depression. *Curr Dir Psychol Sci* 2001;10:173–6.
29. Saluja G, Iachan R, Scheidt PC, et al. Prevalence of and risk factors for depressive symptoms among young adolescents. *Arch Pediatr Adolesc Med* 2004;158:760–5.
30. Li N, Pang L, Chen G, et al. Risk factors for depression in older adults in Beijing. *Can J Psychiatry* 2011;56:466–73.
31. Hall RC, Platt DE, Hall RC. Suicide risk assessment: a review of risk factors for suicide in 100 patients who made severe suicide attempts: evaluation of suicide risk in a time of managed care. *Psychosomatics* 1999;40:18–27.
32. Fnais N, Soobiah C, Chen MH, et al. Harassment and discrimination in medical training: a systematic review and meta-analysis. *Acad Med* 2014;89:817–27.
33. Maida AM, Vásquez A, Hershkov V, et al. A report on student abuse during medical training. *Med Teach* 2003;25:497–501.
34. Cook AF, Arora VM, Rasinski KA, et al. The prevalence of medical student mistreatment and its association with burnout. *Acad Med* 2014;89:749–54.
35. Fried JM, Vermillion M, Parker NH, et al. Eradicating medical student mistreatment: a longitudinal study of one institution's efforts. *Acad Med* 2012;87:1191–8.

36. Jacobs CD, Bergen MR, Korn D. Impact of a program to diminish gender insensitivity and sexual harassment at a medical school. *Acad Med* 2000;75:464–9.
37. Baldwin DC Jr, Daugherty SR, Rowley BD. Residents' and medical students' reports of sexual harassment and discrimination. *Acad Med* 1996;71(10 suppl):S25–7.
38. Keeley PW, Waterhouse ET, Noble SI. Prevalence and characteristics of bullying of trainees in palliative medicine. *Palliat Med* 2005;19:84–6.
39. Li SF, Grant K, Bhoj T, et al. Resident experience of abuse and harassment in emergency medicine: ten years later. *J Emerg Med* 2010;38:248–52.
40. Jamieson J, Mitchell R, Le Fevre J. Bullying and harassment of trainees: an unspoken emergency? *Emerg Med Australas* 2015; 27:464–7.
41. Leisy HB, Ahmad M. Altering workplace attitudes for resident education (AWARE): discovering solutions for medical resident bullying through literature review. *BMC Med Educ* 2016;16:127.
42. Phillips SP, Schneider MS. Sexual harassment of female doctors by patients. *N Engl J Med* 1993;329:1936–9.
43. Chaimowitz GA, Moscovitch A. Patient assaults on psychiatric residents: the Canadian experience. *Can J Psychiatry* 1991;36: 107–11.
44. Denham CR. TRUST: the 5 rights of the second victim. *J Pat Saf* 2007;3:107–19.
45. Wu AW, Folkman S, McPhee SJ. Do house officers learn from their mistakes? *BMJ Qual Saf* 2003;12:221–6.
46. Wears RL, Wu AW. Dealing with failure: the aftermath of errors and adverse events. *Ann Emerg Med* 2002;39:344–6.
47. Wilson JP, Drozdek B, Turkovic S. Posttraumatic shame and guilt. *Trauma Violence Abuse* 2006;7:122–41.
48. Farmer B. When doctors struggle with suicide, their profession often fails them. 2018. Available at: <https://www.npr.org/sections/health-shots/2018/07/31/634217947/to-prevent-doctor-suicides-medical-industry-rethinks-how-doctors-work>. Accessed May 12, 2019.
49. Frank E, Carrera JS, Stratton T, et al. Experiences of belittlement and harassment and their correlates among medical students in the United States: longitudinal survey. *BMJ* 2006;333(7570):682.
50. Kay J. Traumatic deidealization and the future of medicine. *JAMA* 1990;263:572–3.
51. Andrews B, Qian M, Valentine JD. Predicting depressive symptoms with a new measure of shame: the Experience of Shame Scale. *Br J Clin Psychol* 2002;41:29–42.
52. Orth U, Berking M, Burkhardt S. Self-conscious emotions and depression: rumination explains why shame but not guilt is maladaptive. *Pers Soc Psychol Bull* 2006;32:1608–19.
53. Cheung MP, Gilbert P, Irons C. An exploration of shame, social rank and rumination in relation to depression. *J Individ Differ* 2004;36:1143–53.
54. Harder DW, Cutler L, Rockart L. Assessment of shame and guilt and their relationships to psychopathology. *J Pers Assess* 1992; 59:584–604.
55. Tangney JP, Wagner P, Gramzow R. Proneness to shame, proneness to guilt, and psychopathology. *J Abnorm Psychol* 1992;101: 469–78.
56. Hassan R. *Suicide Explained*. Victoria: Melbourne University Press; 1995.
57. Lutgen-Sandvik P, Tracy SJ, Alberts JK. Burned by bullying in the American workplace: prevalence, perception, degree and impact. *J Manage Studies* 2007;44:837–62.
58. Lewis D. Bullying at work: the impact of shame among university and college lecturers. *Br J Guid Coun* 2004;32:281–99.
59. Brown B. Shame resilience theory: a grounded theory study on women and shame. *Fam Soc* 2006;87:43–52.
60. Lester D. The association of shame and guilt with suicidality. *J Soc Psychol* 1998;138:535–6.
61. Tangney JP. Situational determinants of shame and guilt in young adulthood. *Pers Soc Psychol Bull* 1992;18:199–206.
62. Breed W. Five components of a basic suicide syndrome. *Suicide Life Threat Behav* 1972;2:3–18.
63. Ashby JS, Rice KG, Martin JL. Perfectionism, shame, and depressive symptoms. *J Couns Dev* 2006;84:148–56.
64. Hastings ME, Northman LM, Tangney JP. Shame, guilt and suicide. In: Joiner TE, Rudd MD, eds. *Suicide Science*. Boston, MA: Springer; 2002:67–79.
65. Gautam M, MacDonald R. Helping physicians cope with their own chronic illnesses. *West J Med* 2001;175:336–8.
66. Fedewa BA, Burns LR, Gomez AA. Positive and negative perfectionism and the shame/guilt distinction: adaptive and maladaptive characteristics. *Pers Individ Diff* 2005;38:1609–19.
67. Webb M, Heisler D, Call S. Shame, guilt, symptoms of depression, and reported history of psychological maltreatment. *Child Abuse Negl* 2007;31:1143–53.
68. Gilbert P. The relationship of shame, social anxiety and depression: the role of the evaluation of social rank. *Clin Psychol Psychother* 2000;7:174–89.
69. Liang BA. A system of medical error disclosure. *BMJ Qual Saf* 2002;11:64–8.
70. Leape LL. Error in medicine. *JAMA* 1994;272:1851–7.
71. Pronovost PJ, Bienvenu OJ. From shame to guilt to love. *JAMA* 2015;314:2507–8.
72. McGregor HA, Elliot AJ. The shame of failure: examining the link between fear of failure and shame. *Pers Soc Psychol Bull* 2005;31: 218–31.
73. Wear D. Professional development of medical students: problems and promises. *Acad Med* 1997;72:1056–62.
74. Ariza-Montes A, Muniz NM, Montero-Simó MJ, et al. Workplace bullying among healthcare workers. *Int J Environ Res Public Health* 2013;10:3121–39.
75. Australian Medical Association. *Position Statement: Workplace Bullying & Harassment 2009*. Canberra: Australian Medical Association; 2009.
76. Rayner C, Hoel H. A summary review of literature relating to workplace bullying. *J Community Appl Soc Psychol* 1997;7: 181–91.
77. Quine L. Workplace bullying in junior doctors: questionnaire survey. *BMJ* 2002;324(7342):878–9.
78. Cook DJ, Liutkus JF, Risdon CL, et al. Residents' experiences of abuse, discrimination and sexual harassment during residency training. *McMaster University Residency Training Programs*. *CMAJ* 1996;154:1657–65.
79. Srivastava R. I wasn't surprised by Four Corners. *Bullying in medicine is as old as the profession*. 2015. Available at: <https://www.theguardian.com/commentisfree/2015/may/26/i-wasnt-surprised-by-four-corners-bullying-in-medicine-is-as-old-as-the-profession>. Accessed December 1, 2018.
80. Musselman LJ, MacRae HM, Reznick RK, et al. 'You learn better under the gun': intimidation and harassment in surgical education. *Med Educ* 2005;39:926–34.
81. Daugherty SR, Baldwin DC Jr, Rowley BD. Learning, satisfaction, and mistreatment during medical internship: a national survey of working conditions. *JAMA* 1998;279:1194–9.
82. Leape LL, Shore MF, Dienstag JL, et al. Perspective: a culture of respect, part 1 the nature and causes of disrespectful behavior by physicians. *Acad Med* 2012;87:845–52.
83. Timm A. 'It would not be tolerated in any other profession except medicine': survey reporting on undergraduates' exposure to bullying and harassment in their first placement year. *BMJ Open* 2014;4(7):e005140.
84. Srivastala R. How doctors treat doctors may be medicine's secret shame. 2015. Available at: <https://www.theguardian.com/commentisfree/2015/feb/06/how-doctors-treat-doctors-may-be-medicines-secret-shame>. Accessed December 2, 2018.
85. Miedema B, Hamilton R, Lambert-Lanning A, et al. Prevalence of abusive encounters in the workplace of family physicians: a minor, major, or severe problem? *Can Fam Physician* 2010;56: e101–8.
86. Stewart DE, Ahmad F, Cheung AM. Women physicians and stress. *J Womens Health Gend Based Med* 2000;9:185–90.
87. Kowalenko T, Walters BL, Khare RK, et al. Michigan College of Emergency Physicians Workplace Violence Task Force.

- Workplace violence: a survey of emergency physicians in the state of Michigan. *Ann Emerg Med* 2005;46:142–7.
88. Jagsi R, Griffith KA, Jones R, et al. Sexual harassment and discrimination experiences of academic medical faculty. *JAMA* 2016;315:2120–1.
 89. White GE. Sexual harassment during medical training: the perceptions of medical students at a university medical school in Australia. *Med Educ* 2000;34(12):980–6.
 90. Komaromy M, Bindman AB, Haber RJ, et al. Sexual harassment in medical training. *N Engl J Med* 1993;328:322–6.
 91. Sagar SS, Stoerber J. Perfectionism, fear of failure, and affective responses to success and failure: the central role of fear of experiencing shame and embarrassment. *J Sport Exerc Psychol* 2009;31:602–27.
 92. Murray C, Waller G. Reported sexual abuse and bulimic psychopathology among nonclinical women: the mediating role of shame. *Int J Eat Disord* 2002;32:186–91.
 93. Richman JA, Flaherty JA, Rospenda KM. Mental health consequences and correlates of reported medical student abuse. *JAMA* 1992;267:692–4.
 94. Kalafat J, Lester JK. Shame and suicide: a case study. *Death Stud* 2000;24:157–62.
 95. Gutek BA, Koss MP. Changed women and changed organizations: consequences of and coping with sexual harassment. *J Vocat Behav* 1993;42:28–48.
 96. Amstadter AB, Vernon LL. Emotional reactions during and after trauma: a comparison of trauma types. *J Aggress Maltreat Trauma* 1998;16:391–408.
 97. Brown B. *Daring Greatly: How The Courage to Be Vulnerable Transforms the Way We Live, Love, Parent and Lead*. New York: Penguin Random House; 2012.
 98. Hallberg LR, Strandmark MK. Health consequences of workplace bullying: experiences from the perspective of employees in the public service sector. *Int J Qual Stud Health Well Being* 2006;1:109–19.
 99. Brousse G, Fontana L, Ouchchane L, et al. Psychopathological features of a patient population of targets of workplace bullying. *Occup Med* 2008;58:122–8.
 100. Finne LB, Knardahl S, Lau B. Workplace bullying and mental distress—a prospective study of Norwegian employees. *Scand J Work Environ Health* 2011;7:276–87.
 101. Nielsen MB, Hetland J, Matthiesen SB, et al. Longitudinal relationships between workplace bullying and psychological distress. *Scand J Work Environ Health* 2012;38:38–46.
 102. Sierens E, Soenens B, Vansteenkiste M, et al. Psychologically controlling teaching: examining outcomes, antecedents, and mediators. *J Educ Psychol* 2012;104:108.
 103. Angoff NR, Duncan L, Roxas N, et al. Power day: addressing the use and abuse of power in medical training. *J Bioeth Inq* 2016;13:203–13.
 104. Eisenberg JM, Foster NE, Meyer G, et al. Federal efforts to improve quality of care: the Quality Interagency Coordination Task Force (QuIC). *Jt Comm J Qual Improv* 2001;27:93–100.
 105. Bynum WEIV, Goodie JL. Shame, guilt, and the medical learner: ignored connections and why we should care. *Med Educ* 2014;48:1045–54.
 106. Davidoff F. Shame: the elephant in the room. *BMJ Qual Saf* 2002;11:2–3.
 107. Karnieli-Miller O, Vu TR, Holtman MC, et al. Medical students' professionalism narratives: a window on the informal and hidden curriculum. *Acad Med* 2010;5:124–33.
 108. Gaufberg EH, Batalden M, Sands R, et al. The hidden curriculum: what can we learn from third-year medical student narrative reflections? *Acad Med* 2010;85:1709–16.
 109. Lempp H, Seale C. The hidden curriculum in undergraduate medical education: qualitative study of medical students' perceptions of teaching. *BMJ* 2004;329(7469):770–3.
 110. Brainard AH, Brislen HC. Learning professionalism: a view from the trenches. *Acad Med* 2007;82:1010–4.
 111. Weliek JS. Kohut's tragic man: an example from "death of a salesman" *Clin Soc Work J* 1993;21:213–25.
 112. Van Heugten K. Resilience as an underexplored outcome of workplace bullying. *Qual Health Res* 2013;23:291–301.
 113. Wiseman T. A concept analysis of empathy. *J Adv Nurs* 1996;23:62–1167.
 114. Brown B. Brené Brown encourages educators to normalize the discomfort of learning and reframe failure as learning. *About Campus* 2016;20(6):3–7.
 115. Kluger AN, DeNisi A. The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychol Bull* 1996;119:254.
 116. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev* 1977;84:191–215.
 117. Baron RA. Negative effects of destructive criticism: impact on conflict, self-efficacy, and task performance. *J Appl Psychol* 1988;73:199–207.
 118. Tangney JP, Miller RS, Flicker L, et al. Are shame, guilt, and embarrassment distinct emotions? *J Pers Soc Psychol* 1996;70:1256–69.
 119. Cunningham W, Wilson H. Complaints, shame and defensive medicine. *BMJ Qual Saf* 2011;20:449–52.
 120. Schwappach DL, Boluarte TA. The emotional impact of medical error involvement on physicians: a call for leadership and organizational accountability. *Swiss Med Wkly* 2009;139(1):9.
 121. Bock DM. Vulnerability is power in leadership and relationships. *JSD* 2011;32(6):61–2.
 122. Younie L. Vulnerable leadership. *Lond J Prim Care* 2016;8(3):37–8.
 123. Seppala E. What bosses gain by being vulnerable. 2014. Available at: <https://hbr.org/2014/12/what-bosses-gain-by-being-vulnerable>. Accessed May 22, 2019.
 124. Cameron KS. Forgiveness in organizations. *Posit Organ Behav* 2007;2:129–42.

ARTICLE SUMMARY

1. Why is this topic important?

Despite recent occupational and educational wellness improvements in medicine, physician depression and suicide remain a problem. Underlying causes, such as bullying and the handling of medical errors can contribute to shame, which is a very important underlying contributor to depression and suicide.

2. What does this review attempt to show?

This review attempts to describe past and current problems in medicine that may contribute to shame, depression and suicide, including bullying, the hidden curriculum, and the handling of medical errors. It also describes some potential ways that the medical community can handle these issues, including the use of empathy.

3. What are the key findings?

The key findings include that bullying, the hidden curriculum and how errors are handled abuse remain a problem in medicine. They may contribute to shame and lead to poor student and physician mental health. However, there may be ways to improve these issues including constructive feedback, encouraging learning from failure, and the use of connection and empathy.

4. How is patient care impacted?

Patient care may be impacted in that physician mental health could be improved. By addressing potential underlying causes of depression in physicians including bullying and shame, patient care could indirectly improve due to happier and healthier physicians.