

# The Painful Truth: Physicians Are Not Invincible

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## Abstract and Introduction

### Abstract

Physicians are not immune to psychosocial problems but may face unique impediments to attending to them. Self-care among physicians is not a topic generally included as a part of professional training, nor is it a topic that readily receives consideration in professional practice. The stresses of professional practice can exact a great toll, however, and self-neglect can lead to tragic consequences. In some areas, particularly suicide rates, physicians have increased vulnerability, and in other areas problems may be unrecognized (depression, substance abuse, marital problems, and other stress-related concerns). Female physicians show some particular areas of risk. In this paper, we raise questions about how and why physicians may be particularly vulnerable, review the available literature about the extent and nature of such problems in physicians, discuss possible factors related to the development of these problems in physicians, and suggest a variety of solutions to improve physician self-care.

### Introduction

Thomas was a 40-year-old child psychiatrist who was married and the father of three at the time of his suicide by drug overdose. He had been an energetic and successful psychiatrist who was trained at prestigious universities, but he also had a long history of poor self-esteem and much insecurity. He had a deep love for children and was thrilled when he and his wife began to have children of their own. Thomas had begun to have depression after his fellowship, and this depression had worsened considerably during the 2 years before his death. He was dissatisfied with his career and was contemplating a job change. He had become increasingly irritable and withdrawn during the last 2 years of his life, and sometimes attempted to relieve his symptoms with alcohol and/or drugs. He attempted to treat himself for his depression by taking courses of various antidepressant samples that were available in his clinic. He also was in treatment with a psychoanalyst. In his suicide note, Thomas included a message urging two of his adolescent patients who were suicidal not to make the same choice that he was making.

Susan was a 27-year-old married intern (first year resident in psychiatry) at the time of her suicide. She had had depression previously, during medical school, but had responded well to a combination of psychotherapy and medication. By the time she completed medical school, she was in good spirits, excited about her choice of residency, and hopeful about the future. However, Susan had a long history of perfectionistic standards and harsh self-criticism. A few months into her residency program, she began to have depression again. She was reluctant to seek help at that time because she feared lack of confidentiality if she used her insurance. She and her fellow residents shared fears of the possible impact of psychiatric treatment on their ability to get a medical license. She waited 3 months before beginning treatment, and meanwhile her depressive symptoms escalated. She was unable to sleep and to concentrate, which increased her difficulty functioning and produced more self-condemnation. She hid her depression from others. She began therapy and also began treatment with an antidepressant just 3 weeks before her death. A few days before Christmas, while her husband believed she was making preparations for their trip home, she committed suicide with carbon monoxide poisoning. Her husband, family, friends, and colleagues were deeply shocked, never dreaming that she would take her life.

Suicide and other mental health problems among physicians need to be addressed -- a fact that has become clear to us in a personal way. One of us recently lost three psychiatrist friends to suicide. These two women and one man were all married, and one had three young children. All three had been trained at well-respected universities and had at various points been successful in their careers. They were bright and funny (sometimes outrageously so). They were all in their late 30s or early 40s at the time of death. More recently, an intern known by both of us also committed suicide. These deaths have prompted reflection about aspects of the professional role that potentially contribute to the difficulty professionals may have in fulfilling perfectionistic expectations and seeking support or assistance when they do. The goals of this paper are not so much to give answers as to raise questions, review available information about physician distress, provoke thought about issues of well-being for physicians, and identify options for promoting our own mental health.

Physicians fulfill a special role within our society. While they are given many privileges and rewards, they also carry serious responsibilities. Physicians are expected to be healers, available to others whenever a crisis occurs or a medical need arises. They are expected to have unfailing expertise and competence, to be compassionate and concerned, and to provide universally successful care in a cost-effective manner. Such idealized expectations emanate from patients, from families, from society (including payers and regulatory and accreditation agencies), and from within the profession of medicine itself. Self-imposed expectations inhere in the institutions of medicine -- medical colleges, clinics, hospitals, professional associations, and collegial relationships -- and are internalized by students of medicine as they are socialized to become practicing professionals. These expectations become a part of how physicians define themselves.

No physician can consistently meet these idealized expectations. Physicians have human fallibilities and they, too, have needs for support and compassion. While all physicians struggle with these expectations, most find ways to successfully cope with them. Others, however, can develop serious emotional problems. When this occurs, the role of "physician" may actually become a barrier, preventing those in need from getting the help they require. The expectation that being a physician implies being able to perform professionally without faltering, and to meet all expectations without experiencing distress or dysfunction, means that personal problems can be perceived as professional failings. This can foster denial of personal vulnerability. The consequences can be tragic.

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## Rates of Psychosocial Problems Among Physicians

Limited information is available that describes rates of suicide, depression, substance abuse, marital problems, and other emotional problems among physicians. Most of the research done to evaluate physician suicide rates is at least 10 years old. In addition, many findings are contradictory, making interpretations difficult. Methodologic problems, such as the use of only American Medical Association (AMA) data in early research on physician suicide, have also limited conclusions that can be drawn.

### Suicide

The overall physician suicide rate cited by most studies has been between 28 and 40 per 100,000, compared with the overall rate in the general population of 12.3 per 100,000.<sup>[1]</sup> Overall, then, physicians are more than twice as likely as the general population to kill themselves. Each year, it would take the equivalent of 1 to 2 average-sized graduating classes of medical school to replace the number of physicians who kill themselves. This rate appears higher than among other professionals.<sup>[2]</sup>

This phenomenon has been explored since the 1960s. Blachly et al<sup>[3]</sup> gathered data on 249 physicians listed in *JAMA* obituary columns and made extrapolations to determine which specialties had the highest risk. They interpreted their data to show that psychiatrists had the highest suicide rate and pediatricians had the lowest rate. Further support for the notion that psychiatrists might be at higher risk is found in the work of Rich and Pitts,<sup>[4]</sup> who found that psychiatrists committed suicide at twice the expected rate.

Later studies have reported contradictory findings regarding specialty risks, however. Rose and Rosow<sup>[5]</sup> took another look at the evidence gathered by Blachly et al,<sup>[3]</sup> as well as their own review of death certificates in California, and found that differences among specialties were not statistically significant. Craig and Pitts<sup>[6]</sup> studied more than 8,000 physician deaths reported to the AMA and also found no clear differences between specialties. In 1975, Everson and Fraumeni<sup>[7]</sup> determined that one leading cause of death for medical students and young physicians was suicide. More recent data are provided by Samkoff et al,<sup>[8]</sup> who studied mortality among young physicians by examining death certificates for actual causes of death. They determined that suicide was the most common cause of death for young physicians (26% of deaths). Although contradictory evidence exists about differences in suicide rates among specialties, the fact that physicians complete suicide at a higher rate than the general population seems clear. The fact that overall mortality from other causes of death is lower for physicians (than the general population) while the suicide rate is doubled raises serious concern.<sup>8</sup>

Female physicians appear to be especially vulnerable. Suicide rates for women physicians are approximately four times that of women in the general population.<sup>[1,9]</sup> The rates for male and female physicians are roughly equal, whereas women in the general population are much less likely than men to complete suicide.

Many of the risk factors for suicide in physicians correspond to risk factors in the general population. Suicide rates have been found to be higher among physicians who are divorced, widowed, or never married.<sup>[5]</sup> The high-risk physician has been

described as driven, competitive, compulsive, individualistic, ambitious, and often a graduate of a high-prestige school. He often has mood swings, a problem with alcohol or other drugs, and sometimes a non- life-threatening but annoying physical illness.<sup>[10]</sup>

An attempt to identify clinical predictors of physician suicide was conducted by Epstein et al.<sup>[11]</sup> They retrospectively studied results of psychologic testing administered during medical school for possible predictors of later suicide, since nine of the tested students later killed themselves. A psychiatrist blinded to the later outcome was able to identify all nine suicides correctly. Students who later committed suicide were rated significantly higher than controls on many personality factors, including self-destructive tendency, depression, and guilty self-concept.

The AMA and American Psychiatric Association in the 1980s conducted an extensive study of physician suicide.<sup>[1]</sup> In retrospective interviews with family and friends of 142 physicians who died by suicide and 101 physicians who died of other causes, they found little difference across specialties. Physicians who committed suicide were found to have had slightly more difficult or emotionally draining patients than other physicians, both throughout their careers and in the final 2 years of their lives. They also were reported to have fewer friends and acquaintances than controls and to receive and to give less emotional support to others.

In the same study,<sup>[1]</sup> physicians who killed themselves also had more chronic physical or mental disorders at the time of death. More than one third of the physicians who committed suicide were believed to have had a drug problem at some time in their lives, as opposed to 14% of controls. Another difference was in personality styles. Those in the suicide group were perceived as more likely to be critical of others and of themselves. They also were perceived as more likely to blame themselves for their own illnesses. Of the physicians who committed suicide, 42% had been seeing a mental health professional at the time of death, whereas 7% of controls had. One third of the physicians who committed suicide had a history of at least one psychiatric hospitalization. The physicians who committed suicide were more likely to have made previous attempts on their lives and to have talked about killing themselves before the actual suicide. They had a slightly higher incidence of suicide among their own parents than controls. They also reported more emotional problems before age 18 than controls.

### **Depression**

Depression has been noted to be a common occurrence during medical training.<sup>[12]</sup> Rates of clinical depression among interns have been reported to be 27%,<sup>[13]</sup> and 30%,<sup>[14]</sup> and 25% of interns have been reported to have suicidal ideation.<sup>[14]</sup> A review of the literature on stress during residencies documented that depression and increased anger were important problems during training.<sup>[15]</sup> Among practicing physicians, depression has been studied more in female physicians than in male physicians. Welner et al<sup>[16]</sup> published a study in which female professionals were interviewed and evaluated for a lifetime history of depression according to the Feighner criteria. They found that 51% of female physicians and 32% of female PhDs they selected from the general community had a history of depression. Among physicians, psychiatrists had the highest rates, with 73% reporting a history of depression compared with 46% of other female physicians. A more recent study assessed the lifetime prevalence of self-identified depression and suicide attempts among 4,501 US women physicians who responded to the Women Physicians' Health Study, a nationally distributed questionnaire.<sup>[17]</sup> In this study, 19.5% of female physicians reported a history of depression, and 1.5% reported a history of suicide attempts. The latter study suggests that prevalence rates of depression among female physicians may be similar to those in the general population. The contradiction in these findings suggests the need for further study of depression in female physicians. Depression among male physicians also warrants further study.

### **Substance Abuse**

Substance abuse probably has received more attention than suicide or depression as a problem within medicine, and reported prevalence rates vary widely. Recent data suggest that the prevalence of alcoholism and illicit drug abuse by physicians is similar to that among the general population, but physicians may be at increased risk for prescription drug abuse.<sup>[18]</sup> Special substance abuse programs for physicians, such as those of the Talbott-Marsh Clinic in Atlanta and Caduceus Clubs, have been developed all over the United States and Canada.

The availability of addictive agents may play a role in the increased rates of drug addiction among physicians. Physicians also have the opportunity to self-medicate and otherwise treat themselves rather than entrust their care to others, and this may have terrible consequences. Also, physicians are more knowledgeable about the lethal doses of various medications, so this may play a role in the increased rates of successful suicide.

As mentioned earlier, there is a strong link between suicide and both substance abuse and depression. It has been estimated that 40% of physician suicides are associated with alcoholism, and 20% with drug abuse.<sup>[10]</sup> An association between mood disorders, substance abuse, and suicide among physicians has been described.<sup>[19]</sup>

## Divorce

Divorce rates among physicians have been reported to be 10% to 20% higher than those in the general population.<sup>[20]</sup> Furthermore, those couples that include a physician who remain married reported marriages that are more unhappy. Much has been written about the "medical marriage," and some problems have been reported as widespread among physicians' marriages. For many years in pre-med college, medical school, and residency, physicians focus on getting through the next hurdle. They may postpone the pleasures of life that others enjoy. It has been hypothesized that this psychology of postponement may be related to compulsive traits. In particular, the compulsive personality traits that are widely heralded as being key ingredients in professional success may have the unwanted consequence of leading to more distant relationships. Many physicians place work above all else, and it has been speculated that this may serve the purpose for them of helping to avoid intimacy, thus placing strain on intimate relationships.<sup>[21]</sup>

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## Possible Sources of Vulnerability Among Physicians

This overview provides a glimpse of the types and rates of distress among physicians, but it does not begin to tell us *why* this is occurring. What might account for this increased vulnerability among physicians? Several hypotheses are available: Do those more at risk self-select to enter medicine? Do certain traits among physicians increase risk? Do physicians tire from repeated patient contact and become depleted? Do physicians have more difficulty trusting others and confiding in them? Does being a doctor increase risk because physicians become more reluctant than others to seek help? Do physicians have no one to talk to about their concerns? Are they too proud?

### Traits of Physicians That May Increase Risk

Psychologic vulnerabilities of physicians were examined in a study of students who were initially psychologically evaluated during college.<sup>[22]</sup> The study included a 30-year follow-up. Of the students initially evaluated, 47 became physicians. This study found that at follow-up, physicians, especially those involved in direct patient care, were more likely than socioeconomically matched controls to have poor marriages, to abuse alcohol and drugs, and to have obtained psychotherapy. However, closer examination of the early histories of these physicians revealed that these difficulties were strongly associated with life adjustment before medical school, such as childhood instability and adolescent adjustment problems. The study also found that physicians were more likely than controls to show traits of dependency, pessimism, passivity, and self-doubt. The authors concluded that problems are more likely to develop when physicians ask themselves to give more than they have been given.

A number of personality features related to these findings have been hypothesized to be widely shared among physicians. One such characteristic is perfectionism. Perfectionism may lead to conscientiousness during medical school and to a thorough clinical approach, but it may also breed an unforgiving attitude when mistakes inevitably occur. Fear of medicolegal consequences may exacerbate this distress about clinical errors. Christensen et al<sup>[23]</sup> conducted in-depth interviews with physicians about the impact of making clinical mistakes. They found physicians experienced great distress over making mistakes. Even though they recognized the ubiquity of mistakes in clinical practice, they nonetheless believed they could not disclose the mistakes to colleagues and experienced a lack of support from colleagues in addressing these concerns. Perfectionism and the competitiveness engendered in medical training were cited as key reasons for experiencing distress about clinical errors.

McCranie and Brandsma<sup>[24]</sup> used a prospective design to look for personality antecedents of burnout among 440 physicians. These physicians had been given the Minnesota Multiphasic Personality Inventory (MMPI) shortly before entering medical school and then were surveyed an average of 25 years later for symptoms of burnout. The study found that higher burnout scores were significantly correlated with MMPI scales measuring low self-esteem, feelings of inadequacy, dysphoria and obsessive worry, passivity, social anxiety, and withdrawal from others.

Another study approached this issue from the other direction, by looking for predictors of psychologic well-being among physicians. Weiner et al<sup>[25]</sup> surveyed more than 300 physicians and found that individuation (the ability to maintain individual identities around family members) from the family of origin was a strong predictor of psychologic health. Other predictors of well-being were high levels of support from one's closest relationship and lower levels of practice stress.

## Impact of the Culture of Medicine

Could the medical training process be promoting an unhealthy life-style? While going through training, physicians are pushed to endure sleep deprivation, which can result in both cognitive impairment and emotional fragility. In addition, during both medical school and residency, physicians become introduced to the medical mentality of distancing from patients, taking on more and more work without complaint, and learning to compartmentalize feelings. The culture of medicine is one in which perfectionism and "workaholic standards" rule the day. Many practice settings reward long hours and self-neglect. Physicians are encouraged to disregard themselves and deny their own needs. The process of medical education may enhance development of defense mechanisms that make it difficult to ask for help. Could this be part of the problem?

The field of medicine brings with it unique stresses, including coping with intense emotions around issues of suffering, fear, sexuality, mortality, problem patients who can be demanding, and pervasive uncertainty due to the limits of medical knowledge.<sup>[26]</sup> Physicians often struggle during training and in later years to harden themselves to these issues.

Residents respond to the stresses of training in a variety of ways. Some have problems with depression, substance abuse, and marital conflict; others may not have overt psychiatric illness but display other signs of psychologic impairment.<sup>[27]</sup> Kirsling and Kochar<sup>[28]</sup> have reviewed many problems that residents have during training, including the almost universal experience of episodic cognitive impairment, chronic anger, pervasive cynicism, and family discord. Such signs of distress certainly merit examination of the process of medical training.

A "macho mentality" pervades medicine. One report indicates that physicians do not follow schedules for routine medical care for themselves and their families and prescribe medication for themselves rather than seek consultation from a practitioner.<sup>[29]</sup> This macho mentality may also play a role in the increased rates of psychosocial distress within medicine's ranks. Doctors are commonly expected to be strong and support others, but many doctors believe that it is not acceptable to reveal their own weaknesses and vulnerabilities to others. Abraham Verghese<sup>[30]</sup> recently wrote a novel based on his friendship with a physician who was depressed and addicted to drugs and who ultimately committed suicide. He describes this attitude within medicine as "a silent but terrible collusion to cover up pain, to cover up depression; there is a fear of blushing, a machismo that destroys us."

Difficulty with trust may also be part of the problem. Although physicians are accustomed to hearing and protecting the confidences of others, it may be hard for them to let their guard down and really believe that they can trust another.<sup>[29]</sup>

Another phenomenon that may play a role in physician depression and suicide is that of being labeled a "VIP."<sup>[31]</sup> Everyone likes to be considered special, and with fellow physicians, doctors often enjoy special treatment when they do seek help. However, the very fact that they are doctors themselves may cause other doctors to be less aggressive in their treatment. An example of this is found in the friends who committed suicide as mentioned earlier. Two of them were in treatment for depression. Neither was hospitalized, though the wife of one of them requested a hospitalization for him a week before he died. Being a VIP may also increase a physician's own sense of shame and stigma. Physicians may be more reluctant to go for help and admit their own problems if they believe they have been labeled by others as strong and healthy.

Difficulty setting appropriate limits is another characteristic hypothesized to be common among physicians. There is a common expectation that physicians must be available whenever needed, and this can lead to a sense of obligation that makes it difficult to set limits without great guilt. Medical training observes few time boundaries; long hours are assumed to "come with the territory." Professional identity often internalizes this assumption, so that setting limits is perceived as lacking in professional commitment. Even when setting limits is possible, some do not acquire this essential skill and do not discern when setting limits is appropriate.

Self-denial, especially during the training years, also occurs. Physicians become masters at delayed gratification. Many medical students and residents spend years coping with the high level of demand required in medicine, often harboring the expectation that later they will be rewarded with a happy, more balanced life. However, the task-oriented coping skills developed during training do not go away automatically after training. Also, the goal-oriented approach leads to neglecting alternative sources of gratification or self-esteem; thus, after training, physicians may not have a way to find a meaningful balance between work and other life activities.

## Sources of Risk for Female Physicians

Why are women especially at risk? A number of possibilities come to mind. Relational theory, a leading current theory for the psychology of women, proposes that self-esteem for women is predicated on establishing mutually satisfying, reciprocal relationships.<sup>[32]</sup> These relationships are characterized by mutual support and empathy, which enhance the growth and development of each party in the relationship. This reliance on connections with others is inconsistent with the competitive, detached, and self-contained identity traditionally associated with medical practice. The socialization involved in becoming a physician may make it more difficult for women to maintain meaningful relationships with others. This adds a level of stress for professional women since professional practice is, in some ways, incongruent with personal identity. Not only are professional women busy because of their careers, but also the opportunity for empathic relationships is impeded by their career involvement. Some evidence points to this. Carmel and Glick<sup>[33]</sup> surveyed 324 physicians (more than 80% male) and found that while empathy and compassion were characteristics valued by physicians, they were characteristics identified as least likely to be associated with promotion and career advancement.

An additional factor may be that women experience role strain because of the demands of the "second shift." Women professionals nurture and care for patients all day just as their male counterparts do but are more likely to carry the majority of responsibilities for caring for their families at night. Again, some evidence supports this idea. Johnson et al<sup>[34]</sup> found that in marriages between two physicians, wives were more likely to make accommodations in their career based on consideration of effects on spouses and children, while men were less likely to do so. Carr et al<sup>[35]</sup> surveyed 1,979 faculty at academic medical centers in a study of the relationship of family responsibilities and sex to academic productivity. They found men and women faculty without children had equivalent career accomplishments. Among faculty with children, this variable (having dependent children) had a much more deleterious effect on the women's career and seemed to account for much of the slowed career progression of women physicians in academia. A related study by some of the same researchers<sup>[36]</sup> had determined that women and men had equivalent career motivation, so this factor does not explain the career accomplishment differences. It seems, then, that work-family conflict may exert a special stress on women physicians.

It is also possible that part of the increased suicide rate found in women physicians is explained by the fact that these women make better informed attempts than other women, because they have full knowledge of the requirements for lethality. It is likely that all these factors contribute to some degree to the increased vulnerability of women physicians.

These findings suggest that life adjustment before medical school, personality variables such as perfectionism, and emotional problems such as depression and substance abuse all contribute to physician vulnerability. Improvement in physician self-awareness and development of ways to support and intervene in the problem areas are needed.

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## Efforts to Change

In recent years, efforts have emerged to remedy some of these problems. More articles about professional well-being and professionalism, including self-awareness and personal growth, are appearing in the literature.<sup>[37,38]</sup> Physician wellness is emerging as a special interest that transcends specialties. An International Conference on Physician Health has been started as a joint effort of the AMA and the Canadian Medical Association. These conferences have been held every 2 years starting in 1996; the last was in 2000 in Charleston, SC.

Every state also has physician impairment programs available. Similar programs are also available for nurses, pharmacists, psychologists, attorneys, and dentists. Within Tennessee, the Tennessee Medical Association has a Physician Health Program (PHP) that addresses issues of physician impairment. The PHP deals with issues of substance abuse, mood disorders, and other psychiatric disorders, as well as personality disorders. Interventions are made as needed: substance-abusing physicians or "irascible" physicians may be confronted by the PHP with their need for treatment without involvement by the TMA itself.

Another type of intervention that is used primarily in family medicine programs is Balint Groups. Michael Balint was a psychiatrist in England who identified the need for physicians to have group discussions about doctor-patient relationships.<sup>[39]</sup> This approach has been found to be helpful for increasing both self-awareness and understanding of patients and has been applied in many family medicine programs.

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## Ways to Promote Health Among Physicians

The problems associated with physician impairment can result in serious distress, dysfunction, and even death. Addressing these problems should be a priority on both a personal and institutional level.<sup>[40]</sup> Training programs and residencies also need

to be aware of the risks for psychosocial distress, particularly suicide, and take steps to address this problem.<sup>[8]</sup> Individual physicians also need to be aware of these concerns and address them on a personal level.

Although there is little empirical evidence for interventions specifically designed for physicians to address the concerns raised here, information does exist to guide attempts to reduce psychosocial problems for physicians. Some of this information comes from recommendations already suggested in the literature, some from the stress management literature, and some from reflection upon these issues.<sup>[41-43]</sup>

First, it seems important for physicians to practice what they preach to patients. Healthy life-styles are likely to benefit physicians as much as they do the general population. Simple things such as getting enough sleep, exercising, and seeing a physician for regular medical care (rather than self-treatment) appear logical. Setting appropriate limits and pursuing meaningful life activities outside of work are also necessary for physicians to have balance, emotional support, and buffers against the stresses of medical practice.

Second, it is essential to overcome the denial and machismo that currently characterize the profession. This means increasing awareness of the problems we have discussed. (How many physicians are aware that the rate of suicide for physicians is double the rate of the general population?) Finding ways to develop professional self-confidence, competence, and the ability to act with authority that does not also foster a sense of invincibility (which breeds denial) should be a top priority in training programs.

Finally, these changes will not be possible unless the current implicit definition of professional commitment and competence is challenged. Physicians need to accept the notion that professional competence allows for compassion toward other professionals and toward themselves. Recognizing distress in others, offering support and assistance to those in distress, validating the setting of appropriate limits by self and colleagues, and reducing the conflict between work life and family life could all further the cause of addressing these concerns.

To implement such changes will require institutional and personal commitment as well as a change in attitudes and expectations that pervade the profession. Initially, it may be difficult to endorse a model of professionalism that is not based on workaholicism. Much thought and discussion will be required before an alternative conceptualization can be established that incorporates the essential elements of professional practice without requiring unhealthy self-neglect. However, given the detrimental consequences of a failure to do so and the potential for improving the lives of professionals if such an endeavor is pursued, we think it is time for this discussion to be taken seriously.

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