THE INEFFICIENCY OF OVERWORK: HOW WE DO MORE WITH LESS
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Overwork and Medical Culture
In the face of more suffering than healers to relieve that suffering, medical culture has explicitly and implicitly taught practitioners to value availability, hard-work, and self-sacrifice. Self-sacrifice has always come at significant cost, but also historically occurred in communities that cared for healers in turn.

At the turn of the 19th century, human teaching hospitals advertised round-the-clock care – made possible by a residency system whose “house officers” who literally lived on site and competed within a training hierarchy for direct access to clinician instruction. Caregivers were themselves cared for through the unpaid or underpaid work of women like wives and nurses.

The culture of competitive self-sacrifice continues today in human and veterinary medicine, despite significantly changes in cultural norms, the demands of medical practice, and the nature of the human animal bond. So, what should living these values look like today?

How Overwork can Cause Harm
Clinical work is often beneficial to ones’ community and personally fulfilling. However, when the ethic of self-sacrifice is taken to extremes it can result not only in mental and physical harm, but can also harm to ones’ patients and profession.

There is a simple, linear relationship between the time we spend working and the patients we help only within certain ranges. If we continue work beyond a certain point, the quality of our work starts to decline or we become more likely to make mistakes. Additionally, as we overextend ourselves and become stressed, burned out, or experience compassion fatigue, we are also more likely to behave badly, which undermines the productivity of those around us.

If we work too much, we become less productive per hour. This is the point at which it is technically more efficient to hire someone new than to work additional hours. Determining this exact point is difficult because it can vary based on the difficulty of an individuals’ work, whether they get days off and whether they work at night. However, this turning point in clinical work is probably below the 2000 hours per year we consider full time. Studies suggest that part time clinicians in human and veterinary medicine are more productive per hour than their full-time counterparts.\textsuperscript{1,2} More conservative estimates suggest this turning point is closer to 50 hours per week, a number over 41\% of veterinarians were working per week even before the COVID-19 pandemic.\textsuperscript{3}

While not ideal, when the supply of labor is limited, it may make sense to work beyond this limit to meet demand, at least in the short term. However, if working under those conditions ultimately drives employees away from the industry it can be counter-productive in the long-term.

Overwork has potential long-term impacts on industry-wide productivity. As mentioned earlier, in 2019 the Merck Animal Health Veterinary Wellbeing Study found both that 41\% of veterinarians were working over 50 hours per week and that burnout was more likely to occur in veterinarians working over 46 hours per week. 51\% of all veterinarians in the same period said they were
working more hours than they would like. How does this impact the profession? As of 2021, 23% of veterinarians have considered leaving the profession in the past year, and 9% of them think they are “very likely” to leave the profession in the next 2 years. Nearly 52% of our colleagues would not recommend the profession with over a third citing work-life balance as a reason.

After reaching a diminishing rate of returns, if we continue to work additional hours, we reach another breaking point where we are completely unproductive per additional hour. This may be because we literally produce nothing useful in that time or because the mistakes, exhaustion, and interpersonal conflict we that result are counter-productive enough to neutralize the benefit of any good work we do. This point may occur at approximately 65 hours per week.

There is even a point where each additional hours worked actively undermines the work we have already done or the work we have yet to do. Past that point our patients and our practice are better off if we simply stand up and head home. The potential for harm is real. Studies in human medicine have highlighted the potential correlation between medical error and patient outcomes with working hours per week, shift length, workload, and sleep.

Alternatively, less work can mean more patient care. At least one study in dental practices showed that they were able to increase the number of patients they saw per week despite decreasing their overall working hours.

Values of self-sacrifice may convince medical professionals to work not to a point that is actually harmful to patients in the short and long-term. What should we do to ensure our patients get quality care now and in the future?

**Solutions**
Medical culture also equips us with a tool to cope with overwhelming demands. Apply these triage related concepts to overcome overwork obstacles.

**Prioritize**
The central concept of triage is a system for making decisions. It isn’t first come first serve. It sets boundaries and recognizes there is a cap to our capacity. How well are we triaging our current caseload? In addition to triaging patient care, we must recognize, systematize, and prioritize the essential overhead that makes ongoing patient care possible. That includes making time for to prepare, assess resources, and rest.

**Prepare**
It is often important to invest time now to save time later. Consider the French culinary concept of “mise en place” which means that materials are prepared ahead of time and organized for easy access—literally “put in place.” How much time might we save each day if we had a handout close at hand, a template for those SOAP notes, automated text messages for clients, team members with effective training, a client code of conduct, or supplies where we expected? Making time now can save time a hundred times over.

**Resources**
Our capacity is limited by our resources. When we don’t have the resources to diagnose or treat a patient effectively, we must disclose that, refer them if possible, and attempt alternative solutions which may be limited to palliation.
We are often working beyond our real capacity. We are stealing hours and energy from tomorrow to pay for today. When we give frequent discounts – sometimes to those who don’t even ask for them – we may require other clients and team member salaries to absorb the costs. We need to establish the real limits of our resources as explicit boundaries and use those resources efficiently.

We can also get more resources. Our colleagues have often come up with both common sense and creative ways to do just that. Some cope with client financial limitations with angel funds, sometimes paid for by client reward programs. There are an increasing number of non-profit hospitals who can leverage tax deductions and volunteers. Teams have reduced turnover by finding ways to leverage relocating employees remotely. Do we consciously set aside time to recognize our challenges and brainstorm solutions?

Our profession can also put pressure on the public to help provide resources commensurate with the demands they place on us. Leading burnout researcher Christina Maslach Phd. of Berkeley notes that helping professions may be particularly affected by burnout because “the organizational environments for these jobs are shaped by various social, political, and economic factors… that result in work settings that are high in demands and low in resources.” The veterinary profession need not bear the entire cost of what is also seen to be in the public interest – such as minimizing companion animal euthanasia or maintaining/increasing access to pet ownership and veterinary care regardless of socioeconomic status.

Support for caregivers has suffered. Some businesses are stepping up to help fill in the gaps through wellbeing initiatives. While laudable these efforts cannot be enough. Data suggests our mental wellbeing still benefits most from spending time in with those we care about most. Our ability to work well is fundamentally limited by our absolute requirement for an essential resource – rest.4

**Rest**

If we want to continue to serve our patients well, both as individuals as well as a profession, rest is not a luxury but a necessity.

Pioneering sleep researcher Allan Rechtschaffen said, “If sleep does not serve an absolutely vital function, then it is the biggest mistake the evolutionary process has ever made.” The fact that almost all living beings have periods of inactivity, if not complete unconsciousness, that not only deprive them of time they could otherwise spend acquiring resources or reproducing, but otherwise puts them at significant risk of harm and predation, says something powerful about the importance of rest.

It’s clear that sleep-derivation impairs our neurologic functioning, and some suggest these impairments are like those we experience while inebriated. These are not the conditions under which we want to practice medicine. Yet, these changes can occur after just 24 hours of sleep deprivation or after a couple nights of limited sleep, and we are largely unaware of our impairment.

If we don’t prioritize our lives outside the practice, we send powerful signals to our teammates that they shouldn’t either.7 Research suggests that rather than taking away from our ability to do effective work, the way our brains work when we rest allow for the kind of innovative and creative problem solving that is often essential for effective clinical work. Veterinary specific data suggests that for our mental wellbeing most effective use of our rest time is likely 1) time spent with friends and family, 2) physical activity, 3) hobbies, 4) sleep, and 5) volunteering.4
References
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