The Internet: every good thing has a dark side

JOHN GREIST

University of Wisconsin School of Medicine and Public Health, Madison, WI, USA

Worry about problematic effects of communication technology is not new. “When the ingenious Sumerian who invented writing first carved those cuneiform symbols in stone along the Tigris river some 6000 years ago, a skeptic standing nearby predicted with concerned countenance that people would soon stop talking to each other” (1).

Other forms of communication have been seen as problematic, either by replacing earlier venerable and valuable communications or causing vulnerable souls to suffer from a surfeit of the new technology. Printing presses displaced scribes and, as widespread reading became possible, probably produced some problematic excessive readers. The telegraph sped communication and may have created a few compulsive Morse coders amongst the small cadre of telegraphers. Certainly telephoning in its rapid evolution has captured some so completely that they are the butt of jokes about their affliction and certifiable dangers when phoning while driving.

The Internet, with its myriad media – text, voice, video, graphics, etc. – and made ever easier to use even in a hand held device, is surely a candidate for problematic use. Internet non-users are denied its many benefits; at some level, increased use becomes excessive and problematic. It

is to these individuals that Aboujaoude’s skillful overview directs our attention through descriptions and definitions of problematic use, its diagnosis, prevalence, comorbidities, and treatment.

Many human behaviors can be characterized under a bell shaped curve, with the majority distributed normally under the large middle of the bell and extreme deviations from the normal distribution extruded into the tails at the periphery.

While the concept of problematic human behaviors at the tails of a normal distribution is longstanding, it is early days in our study of Internet use. Some doubt there is any Internet problem. But clinicians have begun to see and report patients who are obviously troubled, falling clearly within the broad definition of a clinical disorder causing distress, dysfunction or both. Early observers have described the phenomenon as excessive Internet use (EIU), Internet addiction (IA), pathological Internet use (PIU), compulsive Internet use (CIU), and impulsive compulsive Internet usage disorder (IC-IUD). Since Internet use causing distress/dysfunction exhibits elements of addiction, impulsivity, compulsivity, and obsessiveness, with their implied underlying pathophysiologies as well as other descriptors (e.g., ego syntonic and ego dystonic), the choice of the broader “problematic Internet use” (also PIU) is appropriate at this time. As course, prognosis, temporal stability, pathophysiology and response to treatment are better

understood, a more accurate diagnostic label may be possible.

Faced with an incomplete understanding of problematic Internet use, clinicians must still treat those with distress/dysfunction. While diagnosis should precede treatment, precise diagnosis may be impossible. Even with a diagnostic model that appears to explain a disorder, we are not greatly surprised when an expected efficacious treatment does not work. Some dogs have lice, some dogs have fleas and some have lice and fleas. Honest uncertainty leads to empirical trials until a treatment is found that works, spontaneous remission occurs, or the patient or therapist dies.

Serotonin reuptake inhibitors have shown some benefit in PIU, perhaps addressing elements of obsessive-compulsive disorder, impulse control disorders or comorbid depression. Still, Osler's aphorism rings true: "if many drugs are

used for a disease, all are insufficient".

Cognitive behavior therapy with emphasis on exposure and ritual prevention, daily record keeping, time management skills, assertive communication, and cognitive restructuring appears at least as helpful as medications.

Exercise, with demonstrated benefit in depression and when substituted as another healthier addiction, may prove helpful for PIU. That "no horse has ever run itself to death without a man on its back" reminds us that rapidly increased frequency and duration of exercise often causes injuries, confirming that every effective treatment is a double-edged sword.

One cartoon caricatured clinician declaimed to a forlorn patient: "Modern medical science has no explanation or cure for your malady. Fortunately for you, I happen to be a quack". Alternative therapies such as acupuncture, hyp-

nosis, eye movement desensitization and herbal remedies will be bought by desperate and gullible souls suffering many maladies based on testimonials and in the absence of sound evidence.

Aboujaoude properly concludes by emphasizing the "dramatic changes that our society is undergoing as a result of the Internet revolution" and encourages us "to try to bridge the gap" between what little is known and our clinical need to know about the "pathological use of electronic media" (PUEM – one final acronym).

Reference

1. Slack WV. Patient-computer dialogue: a review. In: van Bommel J, McCray A (eds). Yearbook of medical informatics 2000: patient-centered systems. Stuttgart: Schattinauer, 2000:71-8.