Monitoring Patients With Eating Disorders by Using E-mail as an Adjunct to Clinical Activities

Joel Yager, M.D.

At a recent case conference, an articulate, psychotic 50-year-old hippie from New Mexico told us that for several years he'd been drinking a concoction made of ayahuasca root—the significant ingredient of which is N,N-dimethyl-tryptamine, or DMT—under the close guidance of "Daniel," a *viejo,* or elderly native healer and spiritual teacher, who lived deep in the jungles of the Peruvian Amazon. The man said that this healer frequently communicated with him and that the healer was now urging him to follow the advice of his psychiatrists.

I asked the man how he actually received these communications from his teacher. My residents and I fully expected to hear about his psychic channels and auditory hallucinations. "Why, by e-mail, of course," he replied. He explained that every week or so Daniel would travel out of the jungle by canoe to his nephew's house, and his nephew would send the messages.

If using e-mail to guide his spiritual students works for this Amazonian shaman, what about for us? Since e-mail has become an almost ubiquitous form of communication in every day life, its use between patients and clinicians has become inevitable. The question is no longer whether we should do it, but how we should do it. And under what clinical circumstances? Toward what purposes? With what restrictions? With what potential desirable and negative consequences?

Through the collective wisdom of the medical profession, guidelines are emerging that may be particularly pertinent to the use of e-mail in psychiatric settings (1–3). E-mail can be a useful administrative tool and, in certain situations, can be a useful adjunct to treatment. However, the guidelines stress that even in the best of circumstances, with fully encrypted e-mail systems, e-mail is not an entirely secure mode of communication. Patients who correspond with clinicians through e-mail should be made aware of this concern. Some authorities go so far as to suggest that patients who engage in e-mail with clinicians should be asked to sign a separate informed consent form. Specific guidance has been offered on privacy protection, appropriate topics, use of automatic replies, turnaround times, appropriate language, security measures, record-keeping, password protection, and ethical guidelines regarding confidentiality (3,4).

Some health care systems now include "banners" on e-mail to regularly warn patients about these limitations—for example, the University of Washington uses the following: "If you are a patient, please read below: Because you have chosen to communicate patient identifiable information by e-mail, you are consenting to associated e-mail risks. Please note, e-mail is not secure, and I cannot guarantee that information transmitted will remain confidential. For more information on risks, please go to the UWMC website at www.washington.edu/medicine."

Use of e-mail with patients who have eating disorders

Although conscious of confidentiality concerns, I have increasingly communicated with patients through e-mail over the past 15 years, initially for administrative purposes, such as scheduling and prescription refills, and, more recently—and selectively—about clinical matters as well. I use e-mail as an adjunctive measure in the treatment of outpatients with eating disorders, most typically adolescents with anorexia nervosa (5). To give a sense of these interactions, here are some brief exchanges that took place with a 16-year-old patient with anorexia nervosa over a three-day period. Her messages each preceded a long list of exactly what she ate and the calorie count for each item, which I have not reproduced here because of space limitations.

Patient: I'm trying really hard to move up. We had a party for my sister today! That's why there is so much junk food. [A food list follows.]

JY: Hi T—I wouldn't call it junk food in your situation. For now, you can enjoy "high-density nutrition"—Take care –JY

Patient: Hi [followed by food list indicating that intake had slipped about 200 calories compared with that of the previous day].

JY: Hi T—Thanks for the information. What I think you'll need to do is calculate your intake at around dinner time, and if you're not as high as you need to

Dr. Yager is affiliated with the department of psychiatry of the University of New Mexico School of Medicine, 2400 Tucker N.E., Albuquerque, New Mexico 87131-5326 (e-mail, jyager@unm.edu). Joshua Freedman, M.D., is editor of this column.

be for the day, please eat the remaining calories for the day before you go to sleep—you should be at about 2,000 calories on a daily basis now. Take care and have a great day –JY

Patient: Well I would have calculated it earlier, but I don't even get a chance to type this until 11:00 at night, but I promise I'm trying, but it's so hard. I'm also trying to eat more protein and I'm taking my daily vitamin followed with some kind of chocolate chewing calcium thing. I feel a little more energized after I have some protein. [A food list follows.]

I use e-mail only with patients whom I have first interviewed in person and with whom I am going to have an ongoing professional relationship. Because adolescents with anorexia nervosa often display personality features of obedience, compliance, honesty, diligence, and shyness, they usually follow advice given by their clinicians, including adhering to the requirement for frequent reporting by e-mail. Many respond to my invitations for e-mail contact with flashes of interest, sensing that this is different from the usual method of "going to the doctor."

I exchange e-mail addresses with patients during our first meeting, provide them with e-access, and let them know that I will expect to hear from them. I provide detailed information about my own e-mail habits, informing them about when and in what manner they can expect to hear from me. I also clarify what should not be communicated by e-mail and indicate that messages that raise particular concern will most likely result in rapid contact by telephone to further discuss the matter or to schedule a prompt office visit.

With patients who have eating disorders, frequent e-mails offer an easy and elegant boost to ongoing behavioral monitoring programs and quickly inform me about patients' capacities and motivations to participate seriously in treatment. I ask patients to e-mail me daily to relate their food intake, including calorie calculations and sometimes food composition; exercise activities; and other pertinent information—for example, information about purging. Often the patients will include a sentence or two about their mood and how their day has gone.

Benefits of e-mail

Several obvious benefits result from this program. First, e-mail increases the time available for contact between patients and clinicians, in terms of both the frequency of contact and the amount of psychological time in which patients sense themselves to be in their clinician's presence. Patients often devote considerable time to composing e-mails to their clinicians, and, in turn, receive frequent—albeit brief—feedback. They feel as though their clinician is present, listening, and thinking about them. Much less clinician time is required for reading and responding to patients' messages than would be required with use of the telephone.

In addition, e-mail is an "asynchronous" medium that allows patients to compose and send messages whenever they feel inspired or have the time, not according to the fixed schedules of clinicians. The computer screen provides an "ear" at all times, offering patients the sense of virtually constant access to their clinicians. Furthermore, because patients have been invited or even required to write to their clinicians, this extra access comes without feelings of guilt about intruding on the clinicians' private time.

Also, some patients express themselves more easily through e-mail than face-to-face. They feel more open when they do not have to contend with the clinician's moment-to-moment verbal and nonverbal communications. Some patients adopt less formal communication styles, kidding around in ways that they would never do in person. Patients may also use e-mail to expand on or amend what they've said during an office visit.

Of primary importance, daily e-mail forces patients who have anorexia nervosa to consistently attend to their eating behaviors and to their mental well-being. Patients easily become inattentive to therapeutic expectations between office visits, but daily e-mail requires constant self-assessment, reflection, and self-confrontation of disordered eating behaviors—and honesty. Patients often experience this aspect of the e-mail program as particularly irksome but also particularly helpful.

In addition, when patients provide calorie counts and symptom logs via e-mail, office time is freed up for discussion of more meaningful issues.

Finally, any resistance to using e-mail on the part of patients may alert clinicians to potential treatment avoidance and suggest the need for additional motivational support. However, the cause may be benign: some patients just don't like e-mail.

Responding to e-mail from patients

Generally, only brief replies to patients' e-mails are needed. My replies acknowledge what the patient has written, support his or her efforts, and offer encouragement. I try to provide positive perspectives, encourage self-esteem, and, on special occasions, transmit "virtual hugs"—which in my opinion do not constitute boundary violations. Again, I respond to particularly distressing e-mails by telephone to clarify the situation and perhaps schedule additional office appointments.

Potential negative consequences

Potentially negative effects of e-mail therapy include unwanted disclosures to third parties as a result of lack of computer privacy, failure to perceive and appropriately respond to troubling communications, and failure to respond in a timely or adequate manner. Fortunately, in my experience adverse situations have been infrequent. However, clinicians should recognize that third parties—for example, family members—might read e-mail uninvited. Clinicians should also anticipate that hypersensitive patients who are prone to distortion of facts and events might misinterpret aspects of e-mail communications. Excessive outpourings or otherwise inappropriate messages should be dealt with quickly, empathically, and directly, as with other difficult communications in therapy. Patients should understand that even though e-mail

has become part of the transaction, the relationship remains entirely professional.

For patients with borderline personality disorder, the risk of hypersensitive distortions of e-mail communications may be substantial. Therefore, I do not use e-mail in this manner with patients who clearly have this particular disorder; in my judgment, the risk of distortion or misinterpretation of either the messages or the significance of communicating by e-mail per se may become even more problematic than usual in this patient group.

The use of e-mail also raises a host of legal and ethical issues (4,6,7). Although some clinicians are beginning to develop fee and business structures concerning e-mail, most clinicians currently do not charge separately for e-mail. Ultimately, the time expended may justify the "bundling" of charges for e-mail services with fees for outpatient care.

Future applications

Studies of the use of e-mail in psychiatric practice are still in their infancy. Adding e-mail as an adjunct to face-to-face psychiatric services has the potential to increase adherence, treatment effectiveness, and patient satisfaction in many outpatient settings and in the case of many conditions. If Daniel the shaman can do it from Peru, so can we. Of course, Daniel the shaman doesn't have to worry about HIPPA, the Health Insurance Portability and Accountability Act. ♦

References

1. Rothchild E: E-mail therapy. American Journal of Psychiatry 154:1476–1477, 1997
2. Bailey R, Yager J, Jenson J: The psychiatrist as clinical computerologist in the treatment of adolescents: old barks in new bytes. American Journal of Psychiatry 159:1298–1304, 2002
3. Silk KR, Yager J: Suggested guidelines for e-mail communication in psychiatric practice. Journal of Clinical Psychiatry 64: 799–806, 2003
4. Kane B, Sands DZ: Guidelines for the clinical use of electronic mail with patients. JAMA 5:104–111, 1998
5. Yager J: E-mail as a therapeutic adjunct in the outpatient treatment of anorexia nervosa: illustrative case material and discussion of the issues. International Journal of Eating Disorders 29:125–138, 2001
6. Spielberg AR: On call and online: sociohistorical, legal, and ethical implications of e-mail for the patient-physician relationship. JAMA 280:1353–1359, 1998
7. Robertson J: Guidelines for the Clinical Use of Electronic Mail With Patients. American Medical Association. Available at www.ama-assn.org/ama/pub/printcat/2386.html. Accessed May 16, 2003

ECONOMIC GRAND ROUNDS

Continued from page 1583

10. Sharfstein SS, Goldman H: Financing the medical management of mental disorders. American Journal of Psychiatry 146:345–349, 1989
11. Goldman W, McColloch J, Cuffel B, et al: Outpatient utilization patterns of integrated and split psychotherapy and pharmacotherapy for depression. Psychiatric Services 49:477–482, 1998
12. Astrachan B, Sharfstein SS: The income of psychiatrists: adaptation during difficult economic times. American Journal of Psychiatry 143:885–887, 1986
13. Lohr KN (ed): Medicare: A Strategy for Quality Assurance, vol 1. Washington, DC, National Academy Press, 1990
14. Keller MB, McCullough JP, Klein DN, et al: A comparison of nefazadone, the cognitive behavioral-analysis system of psychotherapy, and their combination for the treatment of chronic depression. New England Journal of Medicine 342:1462–1470, 2000
15. Barlow DH, Gorman JM, Shear MK, et al: Cognitive-behavioral therapy, imipramine, or their combination for panic disorder: a randomized controlled trial. JAMA 283: 2529–2536, 2000
16. Mavissakalian M: Combined behavioral therapy and pharmacotherapy of agoraphobia. Journal of Psychiatric Research 27(suppl 1):179–191, 1993
17. Clarkin JF, Carpenter D, Hull J, et al: Effects of psychoeducational intervention for married patients with bipolar disorder and their spouses. Psychiatric Services 49:531–533, 1998
18. Reducing Tobacco Use: A Report of the Surgeon General. Atlanta, Ga, US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000
19. Kool S, Dekker J, Duijens IJ, et al: Efficacy of combined therapy and pharmacotherapy for depressed patients with or without personality disorders. Harvard Review of Psychiatry 11:133–141, 2003

MULTIMEDIA REVIEWS

Continued from page 1585

individuals who sneak things in or out. Viruses are likely to continue to be a huge problem for users of Windows. It is hard to avoid leaving cookies wherever we go on the Internet. Sophisticated spyware can be implanted covertly. Spam has trashed the e-mail experience, but so far it is less of a problem for PDA users for a variety of reasons.

Physicians say they like PDAs for convenience and a greater sense of privacy and control. PDA versions of the *Physicians' Desk Reference* and other medication programs can help clinicians detect and prevent errors. So far no PDA viruses have been created. Physicians like the idea of having access to instant messaging, a telephone, and their schedule wherever they go. They can use the many wireless links that have sprung up all over to communicate with desktops and other PDAs.

Use of digital encoding for content now includes images—fixed and moving—as well as words and menu-driven applications. However, the number of devices that employ this common digital technology has multiplied because of the desire for using the new media devices and to enhance portability and convenience. ♦

References

1. Wright JH, Wright AS, Salmon P, et al: Development and initial testing of a multimedia program for computer-assisted cognitive therapy. American Journal of Psychotherapy 56:76–86, 2002
2. Murali T: Use of psychiatric rehabilitation CD-ROMS in remote Indian villages. Presented at the 6th World Congress, World Association for Psychosocial Rehabilitation, Hamburg, Germany, 1998
3. Trivedi MH, Kern JK, Marcee A, et al: Development and implementation of computerized clinical guidelines: barriers and solutions. Methods of Information in Medicine 41:435–442, 2002
4. Rush AJ, Crismon ML, Kashner TM, et al: Texas Medication Algorithm Project, Phase 3 (TMAP3): rationale and study design. Journal of Clinical Psychiatry 64:357–369, 2003
5. Das AK: Computers in psychiatry: a review of past programs and an analysis of historical trends. Psychiatric Quarterly 73:351–365, 2002
6. Chin T: Doctors outpace consumers in embracing e-technologies. American Medical News, Oct 6, 2003