

'INTERNET DELUSION' RESPONSIVE TO COGNITIVE THERAPY

HARPREET S. DUGGAL, JAGADHEESAN K. & S. HAQUE NIZAMIE

ABSTRACT

Delusions are known to be influenced by the popular media, the sociopolitical undercurrents and also by the scientific innovations. Internet is one such modern communication tool, which can easily be incorporated into the delusional system of patients by virtue of its semblance to some psychopathological phenomena. We describe a patient with paranoid schizophrenia who developed a delusion about the Internet controlling him but showed a good response to cognitive therapy.

Keywords: Internet, delusions, cognitive therapy

Internet has had a compelling influence on psychiatry. While some authors have eulogized its role in psychiatry in that it has simplified and automated the tasks of caring for patients (Huang & Alessi, 1996), others have been less generous about its impact on this clinical discipline. The later is exemplified by the much talked about syndrome of 'Internet addiction', which in future, according to some authors, may even enter as a nosological entity in the diagnostic systems (Belsare et al., 1997; Stein, 1997). Adding to the downside of the Internet are the increasing number of reports of it being incorporated into the delusional system of psychiatric patients and also the development of de novo Internet delusions in previously healthy individuals (Kobayashi et al., 2001). However, this is in tandem with the knowledge that the content of delusions is influenced by the prevailing sociopolitical situation, the scientific innovations and also the popular media (Sher, 2000). We report a patient with paranoid schizophrenia who developed Internet delusion but fortunately showed a good response to cognitive therapy (CT).

CASE REPORT

The patient, a 31-year-old married male, was diagnosed with paranoid schizophrenia of ten years duration. He was educated till 10th standard and hailed from a lower-middle socioeconomic family with a suburban background. His illness was characterized by persistent persecutory delusions, delusions of control, auditory and olfactory hallucinations and somatic passivity and these had remained mostly unchanged during the course of illness. A predominant theme underlying his psychopathology was his belief that he was being persecuted by his sister-in-law. He had failed trials with a number of conventional antipsychotics and thus clozapine was started but titration above 250 mg per day was precluded by EEG abnormalities.

Over the last one year the patient had additionally developed the delusion that his sister-in-law, through the Internet, was controlling his thoughts and actions and also making him laugh and cry against his wishes. He elaborated that she would command the computer to send voices

to him and that she was knowing his thoughts through the Internet. He was, however, ignorant about the ways to access the Internet and equated the computer to the Internet and had never before seen anyone operating the Internet.

The patient was taken for belief modification by reality testing using collaborative empiricism, the protocol being modified from Chadwick & Lowe (1990). In addition, belief modification by normalizing rationale of Kingdon and Turkington (1994) was also used. Briefly, the patient was first interviewed in a preliminary session during which the delusional belief about the Internet was defined. Following this, over a two-week period his baseline degree of conviction was measured as percentage rating of conviction. This was 100% before starting the CT and while the patient was on a constant dose of 250 mg per day of clozapine. Subsequently, the patient was taken for verbal challenge of the evidences supporting his delusional belief about the Internet in a non-confrontational manner pointing out the inconsistency and irrationality in his belief (Chadwick & Lowe, 1991; Alford & Beck, 1994) which included highlighting the fact that his sister-in-law never possessed a computer in the first place. Besides this he was explained what the Internet meant and how it functioned and what equipment was required to access the Internet. The therapist (first author) and the patient then collaboratively devised an experiment to test the reality of the latter's delusional belief. In this stage, the patient was given a live demonstration about the working of the Internet. At the same time the patient was asked to report whether on being exposed to the computer he felt like crying or laughing or his thoughts were being interfered with or if he was hearing voices from the computer. The patient and the therapist had agreed in advance that this was a genuine test of the belief and failure to hear any voices and experience the feelings of being controlled when exposed to the Internet would mean that the patient's belief was not true. Experiments as this one have been used previously to modify delusions (Chadwick & Lowe, 1990). As expected, the patient did not experience

any symptoms when he was exposed to the Internet. Simultaneously, he was made to consider an alternative explanation that the voices and other phenomena were due to illness (Kingdon & Turkington, 1994). The patient was then lead to shape his own conclusion based on these interventions. Each session was for 20-40 minutes, done weekly and planned over a month. On subsequent interviews the conviction of his Internet-related belief steadily decreased and within two weeks he was totally free from this delusion (the conviction dropping from 100% to 0%) but he still had doubts about the voices being a manifestation of illness. He never developed delusion about the Internet over a two-month follow up.

DISCUSSION

Internet-related delusions have engendered attention only in recent times. A PubMed search using the key words 'Internet delusion' yielded five such previous reports (Tan et al., 1997; Catalano et al., 1999; Catalano & Catalano, 2000; Podoll et al., 2000; Kobayashi et al., 2001). However, to our knowledge this is the first case where cognitive therapy was tried and was also successful. Internet delusions have been described to develop *de novo* in healthy individuals without a psychiatric disorder (Catalano et al., 1999; Catalano & Catalano, 2000) and also in patients with schizophrenia (Tan et al., 1997; Podoll et al., 2000) and schizoaffective disorder (Kobayashi et al., 2001). The peculiarity of our patient and some of the patients described earlier (Catalano et al., 1999; Kobayashi et al., 2001) was that they had no prior technical knowledge of or exposure to the Internet.

The reasons why communication media such as radio, television and now the Internet are so easily incorporated into the delusional systems of patients are only speculative. One hypothesis is the semblance of these modes of communication, which do not have an intervening tangible media, to the psychopathological symptoms such as thought broadcasting

'INTERNET DELUSION' RESPONSIVE TO COGNITIVE THERAPY

(Kobayashi et al., 2001). Another hypothesis is that these patients are threatened by the newer scientific technologies which compounded by their ignorance about them magnifies the fear which takes the form of a delusion (Catalano et al., 1999). Whatever be the genesis of these delusions, the fact that these are transitory in nature and thus carry a good prognosis is reflected by their resolution upon pharmacological intervention in earlier cases and to psychotherapy in our case. The noticeable feature of our patient was the dramatic response to cognitive therapy. Reality testing by way of collaborative empiricism is considered under the purview of cognitive therapy (Alford & Beck, 1994) and has been effective in modifying delusions in some patients with schizophrenia (Chadwick & Lowe, 1990). Ignorance about the Internet may, in part, be responsible for the lesser systematization of this delusional theme, which made this patient more amenable to cognitive intervention. The role of clozapine in ameliorating the Internet delusion in our patient cannot be denied. However, the fact that his other symptoms such as somatic passivity and auditory and olfactory hallucinations did not show any significant change while the Internet delusion completely disappeared following the CT while being on the same dose of clozapine points more in favour of a specific role for the latter.

In conclusion, given the widespread use of the Internet, the psychiatrists will more frequently encounter patients harbouring delusions about the Internet. An observation of significant clinical import is the fact that one need not be a computer-literate to develop these delusions and, therefore, a clinician should inquire about them in less literate people as well. Finally, in addition to pharmacology, CT also holds promise for modifying such delusions. In a recent article, Turkington & Kingdon (2000) demonstrate the effective use of brief, focused, technique-oriented approaches for psychotic patients by the general psychiatrists. Future research employing the combined use of atypical antipsychotics and CT in treatment-resistant cases is encouraged.

REFERENCES

- Alford, B.A. & Beck, A.T. (1994) Cognitive therapy of delusional beliefs. *Behaviour Research and Therapy*, 32, 369-380.
- Belsare, T.J., Gaffney, G.R. & Black, D.W. (1997) Compulsive computer use. *American Journal of Psychiatry*, 54, 289.
- Catalano, G., Catalano, M.C., Embi, C.S. & Frankel, R.L. (1999) Delusions about the Internet. *Southern Medical Journal*, 92, 609-610.
- Catalano, G. & Catalano, M.C. (2000) Social events and scientific innovations may affect content of delusions [reply]. *Southern Medical Journal*, 93, 441.
- Chadwick, P.D.J. & Lowe, C.F. (1990) Measurement and modification of delusional beliefs. *Journal of Consulting and Clinical Psychology*, 58, 225-232.
- Huang, M.P. & Alessi, N.E. (1996) The Internet and the future of psychiatry. *American Journal of Psychiatry*, 153, 861-869.
- Kingdon, D.G. & Turkington, D. (1994) *Cognitive-Behavioral Therapy of Schizophrenia*. New York: Guilford.
- Kobayashi, T., Okada, Y., Nisijima, K. & Kato, S. (2001) "Internet delusion" in a patient with a schizoaffective disorder. *Canadian Journal of Psychiatry*, 46, 89-90.
- Podoll, K., Habermeyer, E., Noller, B., Elbel, H. & Sass, H. (2000) The Internet as a delusional topic in paranoid schizophrenia. *Nervenarzt*, 71, 912-914.
- Sher, L. (2000) Social events and scientific innovations may affect content of delusions.

HARPREET S. DUGGAL et al.

Southern Medical Journal, 93, 440-441.

Stein, D.J. (1997) Internet addiction, Internet psychotherapy. *American Journal of Psychiatry*, 153, 890.

Tan, S., Shea, C. & Kopala, L. (1997) Paranoid schizophrenia with delusions regarding

the Internet. *Journal of Psychiatry and Neuroscience*, 22, 143.

Turkington, D. & Kingdon, D. (2000) Cognitive-behavioral techniques for general psychiatrists in the management of patients with psychoses. *British Journal of Psychiatry*, 177, 101-106.

HARPREET S. DUGGAL*, D.P.M., Resident, JAGADHEESAN K., M.D., Senior Resident, S. HAQUE NIZAMIE, M.D., D.P.M., Professor of Psychiatry & Director, Central Institute of Psychiatry, Kanke, Ranchi - 834006. (*HARPREET S. DUGGAL, M.D., D.P.M., Resident, Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh, PA 15213, USA(email: bobduggal@yahoo.com).

* Correspondence