

Abhijit Das, DM

Address correspondence and reprint requests to Dr. Abhijit Das, Department of Neurology, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, India
abhijit.neuro@gmail.com

EMOROOM

Hello, everybody. Welcome to “Six Minute Science.” Today we have Dr. Njong Masakeda, the director of Cyber Cognitive Research Center, as our guest. He is the man behind the controversial research that claims to solve the mystery of “sudden apneic death,” or SAD.

Good morning, Dr. Masakeda, and welcome to the show.

NM: Good morning.

Your research has stimulated a major international debate and the scientific community is sharply divided over the issue. Some believe it is the most important piece of research done in this century. Contrarily, others see you as a modern-day doomsayer without any valid scientific reason. Is it because you have found the “Emoroom” associated with SAD?

NM: That’s partly true. Emoroom is our new-age religion. It is definitely the greatest invention since, say, the Internet or Google. It revolutionized the neurosciences and changed our way of communication. Most of us cannot imagine life without Emoroom. So I can understand the “that’s blasphemy” mindset of some scientists.

Other reasons?

NM: Our explanation of SAD itself. We found something totally unknown to medical science—a new category of disease. So naturally there is some refractoriness to accept it. Something similar happened when the “prions” were discovered.

Your discovery also has a deep impact on the common people. Everybody, from cab drivers to politicians, has an opinion on it.

NM: That’s because SAD is frightening and it’s lethal. Out of the blue, a person drops dead as the vital brainstem centers suddenly stop working. You never get enough time to take them to the hospital. The mortality rate is over 90%. We still do not know what’s causing it. Neither do we have any effective treatment nor prevention. Already there are more than 3,000 deaths worldwide—it’s a global pandemic. In this chaotic scenario, our study suggests a solution.

Can you explain to us—a little bit of detail—how a social networking technology like Emoroom related to SAD?

NM: It is pure serendipity, but the technology itself is the cause. Neuroscientists developed it to “feel” the state of brain. They combined brain-wave recording techniques with methods of noninvasive brain stimulation. You record the various brain waves of a person and induce them, in real-time, to another person—the receiver now can “feel” the emotions of the other person. Then some smart people simplified the technology and connected it with the Internet and Emoroom was born. That changed the way people communicate. You don’t need to write or speak; you can simply “emote.”

Sitting in New York, you can “perceive” how it feels to play Kyz-kuu from a peasant in rural Kazakhstan. Or a father can really experience the pains of childbirth. Some claimed it as the next step in human evolution—akin to development of language.

That’s true. But how did you conclude that Emoroom is responsible for the pandemic?

NM: Oh, yes. First, we found a direct correlation between the incidence rate of SAD and Internet usage in a country—like lowest in Papua New Guinea, and highest in countries like the United States, the European Union, and BRIC countries. But there was a paradox. Iran had a very low rate despite

relatively high Internet use and Brazil had a disproportionately higher rate. Most interestingly, China had a sudden rise only a year back. So when we analyzed the entire data, the one thing that was able to explain this was the usage of Emoroom.

Brazil has the highest usage rate and hence the highest SAD rate as well. In Iran, there is still state embargo on use of Emoroom, so they are protected. China took off the censorship on Emoroom only a year back, when it saw the sudden rise of SAD. So the correlation was very strong.

Aren't there other alternatives?

NM: But none of them, like phthalate toxicity, unknown viral encephalitis, or "Meme shock," can explain these clear patterns. The pattern of death around the world is strongly correlated with use of Emoroom.

That's really an astonishing hypothesis. But what can be the mechanisms?

NM: We believe it is due to something called "amplitude death."

Sounds interesting!

NM: It is an established concept involving coupled oscillators. For example, 2 pendulum clocks hung from a wooden plank next to one another can keep time in exact synchrony, thanks to weak vibrations transmitted through the plank. Such coupled oscillators also crop up in biological systems. Certain kinds of coupled oscillators, called limit-cycle oscillators, can also stop one another dead. The key is that there should be a time gap for the influence of one oscillator to reach the other. For certain ranges of both the time delay and the strength of the coupling, a pair of oscillators could drag each other to a standstill.

So how does it apply to Emoroom? Nobody was found dead while using it.

NM: In Emoroom, the connected brains behave like coupled oscillators. When you have strong emotions, like joy or pain, you generate lot of gamma and zeta frequency waves. Our model found that at this frequency the time delay and the strength of the coupling can become similar to the limit-cycle oscillators. And this coupling continues even after the brains are disconnected. So a set of brains once appropriately synchronized can stop each other dead at a later point of time. That, we believe, is the cause of SAD.

Any proof?

NM: The rate of SAD is very high in the "emophiles." They are the groups, usually teenagers, who are kind of addicted in sharing strong emotions from an "emoguru." In fact, the outbreak of SAD occurred first in those groups.

Finally, is this the end of Emoroom?

NM: We are too dependent on it to abandon it. But until we develop new technologies to stop SAD, don't risk your life by becoming overtly emotional online.

Neurology[®]

Reflections for March

Abhijit Das

Neurology 2011;76;931-932

DOI 10.1212/WNL.0b013e31820f2dbf

This information is current as of March 7, 2011

Updated Information & Services

including high resolution figures, can be found at:
<http://n.neurology.org/content/76/10/931.full>

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints

Information about ordering reprints can be found online:
<http://n.neurology.org/subscribers/advertise>

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright Copyright © 2011 by AAN Enterprises, Inc.. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

