“Nomophobia”: Impact of Cell Phone Use Interfering with Symptoms and Emotions of Individuals with Panic Disorder Compared with a Control Group

Anna Lucia Spear King1,*, Alexandre Martins Valença1, Adriana Cardoso Silva1, Federica Sancassiani2, Sergio Machado1,3,4,5 and Antonio Egidio Nardi1

1Laboratory of Panic and Respiration, Institute of Psychiatry of Federal University of Rio de Janeiro (IPUB/UFRJ), Rio de Janeiro, RJ, Brazil; National Institute for Translational Medicine (INCT-TM), Brazil; 2Health psychologist. Psychoterapist. Researcher at Department of Public Health, Clinical and Molecular Medicine, University of Cagliari, Italy; 3Quiropraxia Program of Faculty of Health Sciences, Central University (UCEN), Santiago, Chile; 4Institute of Philosophy, Federal University of Uberlandia (IFILU/UFU), Minas Gerais, Brazil; 5Physical Activity Neuroscience Laboratory (PPCAF/UNIVERSO), Niterói, Brazil

Abstract: Panic disorder refers to the frequent and recurring acute attacks of anxiety. Objective: This study describes the routine use of mobile phones (MPs) and investigates the appearance of possible emotional alterations or symptoms related to their use in patients with panic disorder (PD). Background: We compared patients with PD and agoraphobia being treated at the Panic and Respiration Laboratory of The Institute of Psychiatry, Federal University of Rio de Janeiro, Brazil, to a control group of healthy volunteers. Method: An MP-use questionnaire was administered to a consecutive sample of 50 patients and 70 controls. Results: People with PD showed significant increases in anxiety, tachycardia, respiratory alterations, trembling, perspiration, panic, fear and depression related to the lack of an MP compared to the control group. Conclusions: Both groups exhibited dependence on and were comforted by having an MP; however, people with PD and agoraphobia showed significantly more emotional alterations as well as intense physical and psychological symptoms when they were apart from or unable to use an MP compared to healthy volunteers.

Keywords: Anxiety, dependence, nomophobia, panic.

1. INTRODUCTION

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) [1] includes panic disorder (PD) with agoraphobia among its list of anxiety disorders. This disorder is characterized by frequent, recurrent and acute attacks of anxiety. Panic attacks are described as a period of intense fear or anxiety accompanied by somatic and psychological symptoms. These symptoms include a lack of breath, tachycardia, fainting, perspiration and trembling. Agoraphobia [2] is associated with psychological anxieties including a fear of losing control, fainting, dying, being in crowded areas, travel, and feeling ill in public places.

“Nomophobia” [3] is the modern fear of being unable to communicate through a mobile phone (MP) or the Internet. The word “nomophobia” originated in England and is derived from the expression “No Mobile Phobia”, that is, the phobia of being without an MP. Nomophobia [4] is a term that refers to a collection of behaviors or symptoms related to MP use. Nomophobia is a situational phobia related to agoraphobia and includes the fear of becoming ill and not receiving immediate assistance.

Because people’s relationships with MPs, computers and other technology profoundly influence interpersonal behaviors and social habits, these relationships should be continuously monitored and studied [5].

Communication technologies modify people’s interaction with the world, their perception of reality and their interactions with time and space [6]. MPs facilitate individual communication processes and provide a degree of mobility that allows their users to be reached at any time. Moreover, MPs allow people to connect with others wirelessly and without a physical local network. The miniaturization of communication technologies permits an extensive amount of flexibility, mobility and personalization [5].

These portable technologies express the values of freedom of choice, will and action and ultimately emphasize individuals over collectives. Technological evolutions are currently facing powerful, instinctive and primitive forces to which humans. MPs are attractive because they allow users to browse the Internet, work with people from a distance, speak with friends and colleagues, resolve problems and render services without leaving their current location. Because new technology facilitates each of these functions, it leads to the widespread acceptance of and excitement about these devices [7].