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Bracelet to Reduce Panic Attacks in Patients with Panic Disorder (BRPAPPD)

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Abstract: **This paper shows the therapeutic benefits of using the Bracelet to Reduce Panic Attacks in Patients with Panic Disorder (BRPAPPD). This patent was titled (Bracelet to Stimulates Patients of Panic Disorder - BSPPD), number 3796, and was obtained from King Abdulaziz City for Science and Technology (KACST) on 07 Dec 2014 in Riyadh – Saudi Arabia. The idea of this device, which can be considered as a cognitive and behavioural therapy (CBT) tool, is to help patients suffering from panic disorder (PD) to cope with sudden onset panic attacks. The inventor, who is a psychologist, has observed PD patients in his clinic, and has found that they are strongly affected by certain affirmations they hear during clinical sessions e.g. 'I am strong enough to cope with a panic attack' and 'I experienced a panic attack before and nothing happened to me, so nothing will happen to me this time'. These affirmations prepare PD patients and enable them to deal with their panic attacks. The regular appearance of these affirmations on the electronic bracelets' screen, will ensure that PD patients are reminded of them. These affirmations can be repeated according to how frequently the panic attacks occur. A psychologist can calculate the mean number of panic attacks a PD patient has, which will indicate the number of the times that the phrases and sentences should appear on the bracelet screen. In other words, the patients will be stimulated by these affirmations to cope with their panic attacks, as and when needed.**

Keywords: **Panic Attacks, Cognitive Behavioural Therapy, Affirmations, Bracelet, and Patients with Panic Disorder.**

1. INTRODUCTION

Panic disorder (PD) is one of the most common anxiety disorders around the word. The American Psychiatric Association (APA) estimated the PD prevalence range between 1% and 3.5% (APA, 2000); however, the panic attack - not the disorder - is more common. Kleinknecht (1991) showed that about 9% to 14% of people have experienced a panic attack and their lifetime. In other words, the existence of the panic attacks alone does not necessarily mean that the person is suffering from PD (Barlow & Durand, 2005). Coman (2015) defines PD in Oxford Dictionary of Psychology as:

"[An] anxiety disorder in DSM-5 characterized by recurrent, unexpected panic attacks, followed by persistent apprehension about further attacks, concern about the possible effects of the attacks (such as having a heart attack or going insane), or a significant alteration in behaviour brought about by the attacks (such as resigning from a job)" (p. 544).

Whereas, the panic attack is defined as:

"A period during which there is a sudden onset of intense terror, fear, or apprehension, accompanied by signs and symptoms such as a feeling of impending doom, thanatophobia, fear of going insane, shortness of breath, smothering or choking sensations, increased heart rate and palpitation, chest pain or discomfort, dizziness, trembling, sweating, and nausea. Panic attacks occur in several anxiety disorders, including panic disorder, agoraphobia, social anxiety disorder, and specific phobia, and they may also occur in post-traumatic stress disorder" (Coman, 2015, p. 544).

It can be seen that a panic attack is a unit or a form of PD, and that PD is a chronic disorder that causes distress and may affect social function and professional life. Patients with PD suffer various symptoms such as: fast or irregular heartbeat,

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fear of dying, feeling dizzy and faint, hyperventilation, shortness of breath and a choking feeling, chest pain, sweating, trembling or shaking, muscle tension, difficulty sleeping, and a dry mouth (Rachman & De Silva, 2004; Meuret *et al*., 2006; Rachman & De Silva, 2010; Torpy 2011). Also, an attack involves a sudden and quick rush of fear that peaks in short time as in few minutes (Teng et al., 2008).

Although that all these signs are clearly shown physically, diagnosing PD is not an easy task. PD symptoms are similar to other psychiatric disorders' symptoms as well as certain medical conditions; in addition, PD patients may suffer from other mental and/or psychological disorders that cause confusing when making diagnosis (Dattilio & Salas-Auvert, 2000). Therefore, to diagnosis the PD, a patient should show the recurrence of unexpected panic attacks and a significant concern about additional attacks, implications of the attack, and a change in behaviour because of the attacks (Teng et al., 2008).

Such feelings increase the intensity of panic attacks; and patients tend to deal with and treat\ their PD in different ways. On one hand, about 70% to 85% of PD patients seek help from primary care settings (Katerndahl & Realini, 1995; Leon, Olfson & Portera, 1997); however, only 6% to 10% of them actually suffer from PD (Ballenger, 1993). Also, about 43% of PD patients are regular visitors to the Accident and Emergency department (Ballenger, 1998), undergoing a number of unnecessary clinical checks when all their psychosomatics are very normal. Siegel et al., (1990) estimated that visiting physician would cost an individual with PD about $1,068 annually comparing with $403 for a general patient. However, about 2% of the Emergency department patients with PD are actually given the correct diagnosis (Fleet et al., 1996). While other PD patients head in other directions, such as using spiritual therapy, by visiting mosques or churches, or using herbs. Other patients develop irrational thoughts, such as the belief that they are bewitched or are under the power of an evil spirit.

On the other hand, a number of studies have discussed the benefits of cognitive and behavioural therapy (CBT) for PD patients in general, such as (Marks, Basoglu & Noshirvani, 1994; Clark & Beck, 2011; Hendriks *et al*., 2014; Knaus & Carlson, 2014). Nevertheless, not all the workers in the health care belief on the benefits of the CBT, or at less use this method when they treat PD patients. Katerndahl & Ferrer (2004) conducted a survey study about primary care physicians and their belief about effective treatments for PD. They found that the majority (75%) of the physicians believe that CBT is a sufficient and effective therapy for PD, yet only 35% of them use this approach.

The cognitive behavioural theory of panic views a panic attack from different angles: the cognitive, neurobiochemical, affective, and behavioural aspects (Ehlers & Margraf, 1989; McNally, 1990). The theory also takes into account the role of the biological and psychological predisposing factors, and internal - as bodily sensations - and environmental effects (Dattilio & Salas-Auvert, 2000). Furthermore, the theory highlights three important factors that explain the way that a panic attack appears: (1) the perception of physical and bodily symptoms as interceptive cues for threat appraisal and then panic response; (2) the erroneous self-explanation of such physical feelings and changes; and (3) the presence of a psychological vulnerability that leads the disordered person to making the erroneous attributions about their bodily sensations feelings and the panic states (Dattilio & Salas-Auvert, 2000). Therefore, CBT would be a suitable method to help PD patient to cope with the sudden panic attacks, especially that "the aim of cognitive behavioural therapy for PD is to teach patients to identify the internal and external cues that trigger panic attacks and to change their emotional response to these cues" (Smits, O'Cleirigh & Otto, 2006, p. 75). The expectations and beliefs of a PD patient can change their responses to their bodily feelings and challenges, and in some cases can eliminate panic (Dattilio & Salas-Auvert, 2000).

CBT is not a single method, it is actually includes a number of approaches such as exposure and response prevention strategy (when a PD patient imagines a situation that would cause him/her a panic attack, and then imagines how to deal with their panic); relaxation strategy (when a PD patient tries to breath slowly); drift attention strategy (when a PD patient tries to not think about the current panic attack and think about good and nice memories); and self-preparation strategy (when a PD patient prepares him/her self to face the panic attack beforehand). Several studies such as (Babior, 1996; Antony & Norton, 2008; Tompkins, Martinez & Sloan, 2009) emphasised the benefits of using self-preparation strategy on PD patients, which has the premise that being ready and prepared to deal with panic attacks will reduce their frequency.

The current inventor has dealt with PD patients for the duration of his 14 years of clinical experience. He finds that patients who are willing to face panic attacks both mentally and psychologically, have fewer attacks and sometimes the attacks disappear completely. In addition, he has noticed that some patients – especially the ones with higher education levels – are affected by certain affirmations such as, 'No matter how often the panic attacks occur, nothing will happen to

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me; and if anything was going to happen to me, it would have happened before, during the previous panic attacks'. Interestingly, this self-preparation approach – by using affirmations - was discussed in the website of the Panic Relief Center (PRC) that PD patients can control the negative perceptions and thought by using positive affirmations (Maarx, 2012). When a PD patient hears such phrases during the clinical sessions, it helps them cope with their panic attacks. However, when they forget to use these affirmations the attacks return suddenly and sometimes severely. Therefore, it is clear that being mentally and psychologically prepared to deal with panic attacks helps to reduce their recurrence.

2. THE WORKING MECHANISM OF THE BRPAPPD

a) The BRPAPPD memory stores the phrases that most affect the PD patient:

Explanation: Based on the clinical sessions, the affirmations that best prepare the PD patient to deal with their panic attacks are sent to the BRPAPPD memory to be saved.

b) The BRPAPPD screen displays the saved affirmations:

Explanation: Based on how frequently the PD patient suffers from panic attacks, the affirmations will be shown on the BRPAPPD screen. A psychologist can calculate how often the attacks occur, so if the panic attacks appear on a daily basis, the BRPAPPD can be programmed to display one of the affirmations every six hours. Similarly, if the attacks appear once every three days, then the BRPAPPD can be programmed to display an affirmation once every three days. In other words, the affirmations will be shown on the BRPAPPD screen according to the frequency of the panic attacks.

c) Steps the patient must follow when affirmations are displayed on the BRPAPPD screen:

Explanation: When an affirmation is displayed on the BRPAPPD screen it flashes, and in order to stop it, the PD patient must press the stop button on the bracelet once for every word in the affirmation. In other words, if the phrase contains seven words, then the patient must press the button seven times to stop it flashing. This guarantees that the patient will read every single word in the affirmation, and therefore, he/she will be mentally and psychologically ready to deal with their panic attack.

d) The nature of the affirmations shown on the BRPAPPD screen:

Explanation: Based on the clinical sessions, using CBT, the affirmations the PD patient finds most effective will be added to his/her BRPAPPD. Each patient is affected by different phrases and sentences. If a patient is affected by a sentence from the Quran or the Bible for example, it does not mean that another patient will be affected similarly by the same sentence. A number of studies (e.g. Beck & Emery, 1985; Clark, 1986; Beck, 1993; Barlow, 2002) highlighted that the panic attacks might associated with the patient's previous physical or/and psychological experiences. Therefore, the affirmations should be chosen according to the PD patient's cultural and cognitive background; i.e. there is not a fixed set of affirmations stored in every BRPAPPD memory.

e) The appearance of the BRPAPPD:

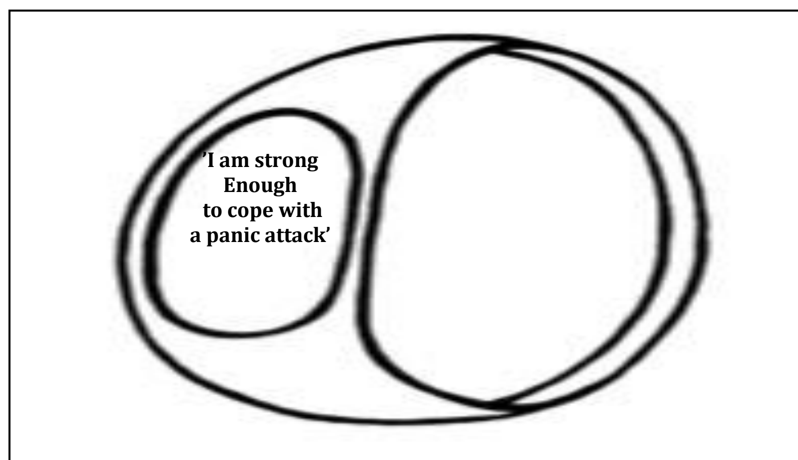

Figure 1. shows the patent, Bracelet to Reduce Panic Attacks in Patients with Panic Disorder - BRPAPPD that shows an affirmation on its screen

Explanation: This patent, Bracelet to Reduce Panic Attacks in Patients with Panic Disorder - BRPAPPD, was titled (Bracelet to Stimulates Patients of Panic Disorder - BSPPD), number 3796, and was obtained from King Abdulaziz City for Science and Technology (KACST), on 07 Dec 2014 in Riyadh – Saudi Arabia. KACST is the most well-known institution in Saudi Arabia and the Middle East for innovation, research, and science. The BRPAPPD patent was obtained after negotiations and discussions with the KACST over nearly four years based on the KACST organizational procedures.

3. CONCLUSION

This paper discusses the benefits of using a cognitive behavioural therapy tool, which is a patent called the Bracelet to Reduce Panic Attacks in Patients with Panic Disorder (BRPAPPD). This device is regularly showing in flashes affirmations like 'I experienced a panic attack before and nothing happened to me, so nothing will happen to me this time'. The frequency of the shown affirmations on the BRPAPPD screen depends on the frequency of the panic attacks. The BRPAPPD is using self-preparation approach, which is one of the cognitive behavioural therapy strategies, and it will keep the PD patients stimulated by the affirmations that help them cope with sudden onset panic attacks, as and when needed.

4. RECOMMENDATION

This paper recommends the use of tools and instruments helpful to CBT, rather than depending solely on clinical sessions. Patients with PD need continual assistance in dealing with their panic attacks. The current patented bracelet (BRPAPPD) would meet the needs of PD patients and phobia patients in general.

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REFERENCES

[1] Antony, M. & Norton, P. (2008) The anti-anxiety workbook: proven strategies to overcome worry, phobias, panic, and obsessions (Guilford self-help workbook). New York: The Guilford Press.

[2] Babior, S. & Goldman, C. (1996) Overcoming panic, anxiety and phobias: New strategies to free yourself from worry and fear. West Michigan: Whole Person Associates, Inc.

[3] Ballenger, J. C. (1993) Overview of panic disorder. Transactions of the American Clinical and Climatological Association, 105, pp. 36-53.

[4] Ballenger, J. C. (1998) Treatment of panic disorder in the general medical setting. Journal of Psychosomatic Research, 44, pp.5-15.

[5] Barlow, D. H. (2002) Anxiety and its disorders: the nature and treatment of anxiety and panic. 2nd ed. New York: Guilford Press.

[6] Barlow, H. & Durand, M. (2005) Abnormal psychology: An integrative approach. 4th ed. Belmont, CA: Thomson/Wadsworth.

[7] Beck, A. T. & Emery, G. (1985) Anxiety disorders and phobias. New York: Basic Books.

[8] Beck, A. T. (1993) Cognitive therapy: past, present, and future. Journal of Consulting and Clinical Psychology, 61, pp.194-198.

[9] Clark, D. & Beck, A. (2011) The anxiety and worry workbook: The cognitive behavioral solution. New York: The Guilford Press.

[10] Clark, D. M. (1986) A cognitive approach to panic. Behaviour Research and Therapy, 24, pp.461-470.

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[11] Colman, A. M. (2015) Oxford dictionary of psychology. 4th ed. Oxford: Oxford University Press.

[12] Dattilio, F. M. & Salas-Auvert, J. A. (2000) Panic disorder assessment and treatment through a wide – angle lens. Phoenis, AZ: Zeig, Tucker & Co., Inc.

[13] Ehlers, A. & Margraf, J. (1989) The psychophysiological model of panic attacks. In Emmelkmp, P. M. G., Everaerd, W. T. A., Kraaimaat, F. & Van Son, M. J. M. (eds.), Fresh perspective on anxiety disorders (pp. 1-30). Amsterdam: Swets & Zeilinger.

[14] Fleet, R. P., Dupuis, G., Marchand, A., Burelle, D., Arsenault, A. & Beitman, B. D. (1996) Panic disorder in emergency department chest pain patients: Prevalence, comorbidity, suicidal ideation, and physician recognition. American Journal of Medicine, 101, pp. 371-380.

[15] Hendriks, G., Kampman, M., Keijsers, G., Hoogduin, C. & Voshaar. (2014) Cognitive-behavioral therapy for panic disorder with agoraphobia in older people: A comparison with younger patients, Depression & Anxiety (1091-4269), 31(8), pp. 669-677,

[16] Katerndahl, D. A. & Ferrer, R. J. (2004) Knowledge about recommended treatment and management of major depressive disorder, panic disorder, and generalized anxiety disorder among family physicians. Primary Care Companion to the Journal of Clinical Psychiatry, 6, pp.147-151.

[17] Katerndahl, D. A. & Realini, J. P. (1995) Where do panic attack sufferers seek care? Journal of Family Practice, 40, pp.237-243.

[18] Kkeinknecht, R. A. (1991) Mastering anxiety: The nature and treatment of anxious conditions. New York: Insight Books.

[19] Knaus, W. & Carlson, J. (2014) The cognitive behavioral workbook for anxiety: A step-by-step program. 2nd ed. Oakland: New Harbinger Publications.

[20] Leon, A. C., Olfson, M. & Portera, L. (1997) Service utilization and expenditures for the treatment of panic disorder. General Hospital Psychiatry, 19, pp.82-88.

[21] Maarx, K. (2012) Overcoming panic attacks using cognitive behavioral therapy (CBT), Panic Relief Center. Available at: http://www.panicreliefcenter.com/overcoming-panic-attacks-using-CBT.php (Accessed: 29 September 2015).

[22] Marks, I., Basoglu, M. & Noshirvani, H. (1994) Cognitive therapy in panic disorder. The British Journal of Psychiatry, 164(4), pp. 556-559.

[23] McNally, R. (1990) Psychological approaches to panic disorder: A review. Psychological Bulletin, 108, 403-419.

[24] Meuret, A., White, K., Ritz., T., Roth, W., Hofmann, S. & Brown, T. (2006) Panic attack symptom dimensions and their relationship to illness characteristics in panic disorder, Journal of Psychiatric Research, 40(6), pp. 520-527.

[25] Rachman, S. & De Silva, P. (2004) Panic disorder: the facts. 2nd ed. Oxford: Oxford University Press.

[26] Rachman, S. & De Silva, P. (2010) Panic disorder. 3rd ed. Oxford: Oxford University Press.

[27] Siegel, L., Jones, W. C. & Wilson, J. O. (1990) Economic and life consequences experienced by a group of individuals with panic disorder. Journal of Anxiety Disorders, 4, pp. 201-211.

[28] Smits, J. A. J., O'Cleirigh, C. M. & Otto, M. W. (2006) Combining cognitive behavioral therapy and pharmacotherapy for the treatment of panic disorder. Journal of Cognitive Psychotherapy, 20(1), pp. 75-84.

[29] Teng, E. J., Chaison, A. D., Bailey, S. D., Hamilton, J. D. & Dunn, N. J. (2008) When anxiety symptoms masquerade as medical symptoms: What medical specialists know about panic disorder and available psychological treatments. Journal of Clinical Psychology in Medical Settings, 15(4), pp.314-321.

[30] Tompkins, M., Martinez, K. & Sloan, M. (2009) My anxious mind: A teen's guide to managing anxiety and panic. Washington, DC: Magination Press.

[31] Torpy, J. M. (2011) Panic disorder. JAMA: Journal of the American Medical Association, 305(12), pp.1256-1256.