


Identifying Better?

Analytical Trends to Check Subjects' Medications Using Biofeedback Therapies

Rohit Rastogi, Department of Physics and Computer Science, Dayalbagh Educational Institute, Agra, India & CSE in ABESec, Ghaziabad, India

 <https://orcid.org/0000-0002-6402-7638>

Himanshu Verma, ABES Engineering College Ghaziabad, India

Yash Mishra, ABES Engineering College, Ghaziabad, India

Mayank Gupta, Tata Consultancy Services, Noida, India

Devendra K Chaturvedi, Dayalbagh Educational Institute, Agra, India

ABSTRACT

Tension is one of the most common problem found in people nowadays. With problems, the stress level increases and headaches are the most common problem faced during stress. The common headache found is tension type headache (TTH). The present study aims at studying the effect on TTH of various biofeedback technique like EMG and GSR on various modes like audio and visual the experiment was conducted on 90 people out of which 78 remained until the end (46 females and 32 males) were randomly assigned groups like EMGa, EMGav, GSRA, GSRav and the control group. The control group was only given the medication given by doctor. The session of the biofeedback therapy was conducted for over a time of 20 minutes in an isolated chamber. The therapy continued for over a period of 12 months. The results were taken after 1 month, 3 months, 6 months, and 12 months.

KEYWORDS

AM - Alternative Medicine, Analgesic Consumption, Anti-Depressants, Audio, Biofeedback, EMG, GSR, Muscle Relaxants, OM - Other Medication, PM Prophylactic Medication, Stress, Triptans, TTH, Visual

INTRODUCTION

Biofeedback

The term “Biofeedback” as explained by Rubin A. (1992) is a technique which can be used to control our body function such as heart rate. With biofeedback we relate to our body part and receive electrical signals about them. It helps us to control our body such as reducing pain, relaxing pain. This technique is often used to improve our health.

Tension Type Headache and Stress

Fumal and Scohnen (2008) told that tension type headache is widely spread type of headache found in most of the people about 90 percent of the headache are of tension type. It is called by various names

DOI: 10.4018/IJARPHM.2020010102

Copyright © 2020, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

like including tension headache, muscle contraction, stress headache, ordinary headache, essential headache etc. Rastogi et al. (2018a) and (2018b) explored about TTH, TTH usually last for about 30 minutes to 7 days, depending on its intensity. Rastogi et al. (2018b) and Boureau found the pain level is generally ranging from mild to moderate it is accompanied by vomiting and nausea.

Analgesic Consumption

Analgesic is also known as a pain killer it is basically a type of drug which is used to achieve pain relief (analgesia). The word analgesia itself means “the absence of the sense of pain while remaining conscious”. Analgesic drug affects our mind and nervous system in different ways which is well explained by Rastogi et al. (2017a). They are different from anesthetics. Which either temporarily or in some cases completely vanishes the sensation. Haynes et al. (1975) Analgesics include paracetamol, NSAIDs such as the salicylates, and opioid drugs. Nonsteroidal anti-inflammatory drugs are kinds of drug which lower the fever, reduces the pain and in case of Higher dose decrease inflammation. Some of the common drugs are aspirin, naproxen, ibuprofen. As per Boureau et al. (1991), these all are available across all the countries easily. So basically, it was the group that consumed analgesic medicines to get relief from the stress and headache.

PM

Along with traditional headache medication there are other drugs that help to reduce headache these are antidepressants in medical this approach is referred as prophylaxis. An analysis published in 2014 proposed that antidepressants also reduces the depression in the people suffering from hepatitis c by 40 percent. Some studies even depict that is the person is pretreated with anti-depressants there are likely less chance to have depression symptom. Even the person which take depressants after their stroke are less likely to get depression is mentioned by Rastogi et al. (2018c) and Cassel (1985).

AM - Alternative Medicines

Turk et al. (2008) and Kropotov (2009) expressed that alternative medicine is also known as pseudo medicine or questionable medicine. Alternative medicine is claimed to have the healing effect like that of medicine which is unproven or impossible to prove and are likely to be harmful. According to scientist a therapy is said to be unproven and not working when it does not follow the natural laws and violate it. alternative medicine is not same as traditional medicine. alternative medicine is a bit dangerous as it does not give proper results .it is used by significant number of people, but still large amount of funding is raised by united state government. The industry of alternative medicine is highly profitable. this fact is overlooked, or we can say that hidden by media, with alternative medicine portrayed positively when compared to big pharma. In the experiments of Wenk-Sormaz (2005) and Rastogi (2019a), the license for practicing varies based on different health care provider and different countries. Though the practice of alternative medicine is illegal, yet it is promoted by various practitioner in cancer treatment. Alternative medicine is criticized for taking advantage of the weakest members of society.

OM - Other Medication

Millea et al. (2002) and Mullaly et al. (2009), This was the group which was called as OM (Other medication) which include muscle relaxants and use of triptans. Triptan is a drug of the family tryptamine which is used as abortive medication in the treatment of headache and migraines. this drug is effective in treating individual headache, but it is not a cure for tension type headache especially for a person suffering from migraine. They are sometime effective in disabling the tension type headache. Triptans do not relieve other kinds of pain (MacCrory et al., 2001).

Carlson (2013) and Rastogi (2018d) showed that Triptans are highly efficient in reducing the chances of attack in 70 to 80 percent people within 3 to 90 minutes. Triptans are not recommended to a person with skin sensitivity .it is advisable to take triptan after twenty minutes of headache's

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/identifying-better/240753

Related Content

The Self-Cultivation Model of Lifelong Learning: Toward Post-Egoic Development

Avraham Cohen, Heesoon Bai and Karen Fiorini (2014). *Handbook of Research on Adult and Community Health Education: Tools, Trends, and Methodologies* (pp. 333-351).

www.irma-international.org/chapter/the-self-cultivation-model-of-lifelong-learning/113627

Future of Jobs and Humans in a Tech-Centric World

Rama Prasad Varanasi (2019). *Forecasting and Managing Risk in the Health and Safety Sectors* (pp. 99-108).

www.irma-international.org/chapter/future-of-jobs-and-humans-in-a-tech-centric-world/221616

Non-Probabilistic Sampling in Quantitative Clinical Research: A Typology and Highlights for Students and Early Career Researchers

Nestor Asiamah, Henry Kofi Mensah and Eric Fosu Oteng-Abayie (2022). *International Journal of Applied Research on Public Health Management* (pp. 1-18).

www.irma-international.org/article/non-probabilistic-sampling-quantitative-clinical/290379

Emotional Intelligence and Online Healthcare: The Case Study of Canada

Khadijeh Roya Rouzbehani (2019). *International Journal of Applied Research on Public Health Management* (pp. 1-14).

www.irma-international.org/article/emotional-intelligence-and-online-healthcare/232253

Towards Secure Off-Label Drug Prescribing and Improved Drug Supply

(2018). *Advanced Systems for Improved Public Healthcare and Disease Prevention: Emerging Research and Opportunities* (pp. 101-134).

www.irma-international.org/chapter/towards-secure-off-label-drug-prescribing-and-improved-drug-supply/202936