Master’s thesis

Length:

* Referencing: APA 6th or 7th
* Empirical theses: Normally 30-40 pages, no longer than 50 pages, including figures and tables, excluding references, front page, table of contents, and abstract.
* Page and word formatting: A4, Times New Roman 12, paragraph 1.5, frame 2.5 cm
* Abstract: up to 500 words

Elements:

* Frontpagege
* Table of contents
* Acknowledgments
  + Østfold sykehus, Andre Sevenius, Carsten Bundt, Ingmar Clausen, Ingrid Autran, Lowan Stewart
* Introduction
  + Background
  + Hypothesis & research question
* Methodology
  + Sampling
  + EEG
    - Active electrodes
    - 10/20 system
    - 32 electrodes
    - Sampling rate
  + Saliva sampling
    - Storage
    - QPCR analysis
  + Questionnaires
* Results
  + Spectral EEG analysis
* Discussion
* References
* Additional material

Introduction

* Background

Depression is a severe mental disorder affecting around 5% of the adult world population (World Health Organization, 2021), and 20% to 25% of adults may experience an episode of major depression at some point during their lifetime (Bruce, 2020). Those diagnosed with major depression are usually treated with psychotherapy, medication, or both (SOURCE). According to Howland (2015), any first-choice antidepressant medication significantly alleviates depression symptoms in 50% to 70% of MDD patients. However, only 50% to 33% reach complete remission, which leaves 65% to 83% with untreated or residual depression symptoms (Howland, 2015).

About 30% of MDD patients do not experience any alleviation from either antidepressant therapy, talking therapy, or combinations (Zhdanava et al., 2021; Little, 2009). This patient group is then diagnosed with treatment-resistant depression (TR-D). The TR-D patient group is almost 30% more expensive than the MDD patients to the local health care services (Olchanski et al., 2013), making up a societal cost between $29-$48 billion a year in the US alone (Mrazek et al., 2014).

A typical TR-D patient would either change medication or receive an added antidepressant to their prescription (Howland, 2015).

**References**

Bruce, D. F. (2020, September 13). *Major Depression (Clinical Depression)*. WebMD. https://www.webmd.com/depression/guide/major-depression

Howland, R. H. (2015). Therapeutic Armamentarium for Treating Depression. *Postgraduate Medicine, 122*(*4*), p. 66-93. <https://doi.org/10.3810/pgm.2010.07.2176>

Little, A. (2009). Treatment-Resistant Depression. *American Family Physician*, *80*(2), 167–172. https://www.aafp.org/pubs/afp/issues/2009/0715/p167.html

Olchanski, N., McInnis Myers, M., Halseth, M., Cyr, P. L., Bockstedt, L., Goss, T. F., & Howland, R. H. (2013). The Economic Burden of Treatment-Resistant Depression. *Clinical Therapeutics*, *35*(4), 512-522. https://doi.org/10.1016/j.clinthera.2012.09.001

World Health Organization. (2021, September 13). *Depression*. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/depression

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