

Brain hype and for-profit medical devices



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Scope

This study aimed to provide a complete bioethical analysis on the topic of direct-to-consumer (DTC) **for-profit Neurotechnology**, i.e. commercialized devices that claim to do something positive for our brains



Relevance

Understanding the **bioethical implications** of DTC Neurotechnology **and providing suggestions on possible regulations** for such devices not only fills a gap in the literature, but also provides guidance for both manufacturers and customers



Analysis

1) We carried out a first assessment on one major online shopping platform to understand and outline the specifics of the products available, and we divided them into three categories: **eeg-like products, neuro-supplements, and mental health products.**

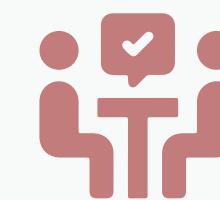
2) We compared these to similar products such as **wearable devices, smartwatches,** and direct-to-consumer **genetic testing**, and we found that they have many similarities, like the absence of a traditional doctor-patient relationship, but one big difference: the **effects** on people's health, in the case of direct-to-consumer neuro-products, remain **unknown**

3) We carried out a comparative bioethical analysis of the classical concepts of **Autonomy, Justice, Beneficence, and Non-maleficence** in order to better contextualize and understand the bioethical implications of DTC Neurotechnology



Results

Finally, in the light of our analyses, we provided some **recommendations** on what should be essentially present in **policies** and **guidelines** for the manufacturers of DTC for-profit medical devices, to avoid creating false expectations and guaranteeing safety while using such products, i.e. **in order to avoid brain hype.**



Discussion

- **Proper safety standards**, have to be guaranteed with proper research on the products before they are commercialized
- **Transparency** must be seen as an essential core value both in the marketing process and in after-sales assistance
- **Assessment of risk** both in the manufacturing process and after. This should be shared with customers in a clear, public, and understandable way

References:

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