Brain hype and for-profit medical devices

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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.

- 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.

Discussion

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.

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.

References: