**Utilization of Wearables and Trends in mHealth in Current Clinical Research of Neurologic Conditions**

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**Objective:** We analyze how wearables are used in clinical research by describing how wearables contribute to endpoint analyses (intervention vs. measurement tool) in the four clinical areas: neurologic disorders, mental health disorders, substance use disorders, and musculoskeletal pain.

**Research Hypothesis:** We would observe more clinical trials studying wearables as an intervention rather than as a measurement tool.

**Method:**
- Conducted a literature search on pubmed.gov to survey general wearable trends
- Searched on clinicaltrials.gov to find 175 studies from 2010-2020 using the term "wearable" in each of the four clinical areas
- Recorded trial characteristics, including type and utilization of the wearable

**Conclusion:** Our findings suggest that not only are wearables studied as interventions, but they are also being used as measurement tools for other interventions such as drugs, behavioral therapy, and devices. Their ability to obtain usable and actionable health markers from large pools of data and their growing diversity in capability demonstrates their clinical utility. Our research provides a deeper analysis of how wearables are being used as an intervention for neurologic conditions and a reliable tool to capture endpoints for other treatments in this clinical area.

**Future Research:** Digital health technology has grown in recent years both as an intervention for various conditions and in its availability in different forms to patients and providers. Therefore, more research should be conducted to further describe how wearables can improve healthcare, aid in data collection and efficiency in clinical trials.

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