Altmetric data analysis reveals how Parkinson's disease research affects the world

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February 13 2017, London, UK and Boston, USA: ÜberResearch and Altmetric, leading data and analytics companies serving scientific funders and research organizations, have published an analysis of Parkinson's disease research papers with the highest Altmetric Attention Scores in the Journal of Parkinson's Disease. The publication is the first in a series aimed at utilizing Altmetric data to provide a more nuanced understanding of how the announcements of new medical discoveries affect the wide-range of disease-specific stakeholders including researchers, funders, care providers, and patients.

Altmetric Attention Scores are a weighted count of the volume of attention a research article has received, intended to reflect the likely visibility and reach of the publication amongst audiences both within and beyond academia.

The research team was led by Prof. Bastiaan R. Bloem, Medical Director of the Parkinson Centre Nijmegen (ParC), a Dutch center of excellence for Parkinson's disease. Bloem commented, "Our paper opens up a fascinating discussion about how we should define the quality of good research. Traditional and widely accepted metrics are based on citations and judgement by peers in the field. But the world is changing fast, with lay people now having an unprecedented ability to offer their own feedback on issues that were previously reserved for experts." He continues "Our paper highlights the fact that science is no exception, and
that discussions about research papers in social media such as Twitter and Facebook offer a new dimension of scientific quality, by reflecting how important and societally relevant new research findings might be. It was exciting to see how the new 'altmetrics' largely overlapped with traditional measures of quality, but also offered complementary insights."

First author on the paper, Dr. Rui Araújo, a neurology resident in the Department of Neurology in the Centro Hospitalar e Universitário de Coimbra (PT), elaborated, "There seems to be a correlation between altmetrics and conventional metrics, but notable exceptions occur. Institutional leaders who are serious about understanding how research affects the world should be aware of publications with high Altmetric Attention Scores, regardless of whether they come from discoveries made internally or by competing groups."

Aaron Sorensen, ÜberResearch's Senior Scientometrics Analyst, and Stacy Konkiel, Altmetric's Director of Research & Education, led the team from a data-science perspective. It was Sorensen's idea to make the Parkinson's analysis the first of a series. "My hypothesis is that the degree to which the root cause of a given disease is understood and the degree to which that disease is treatable will have a big impact on the kinds of medical discoveries which generate the greatest online attention. Using the same methodology we employed for Parkinson's, our plan is to study other neurological disorders to determine whether there are disease-specific factors which explain any observed differences in the type of biomedical research most likely to receive a high Altmetric Attention Score."

The results are published in this paper in the Journal of Parkinson's Disease.

**More information:** Rui Araújo et al, Top Altmetric Scores in the