Evidence-Based Analysis of NPS Literature: Extrapolations Based on Systematic Review of Literature

Evidence-Based Analysis of the Published Literature

The research output within the discipline of *novel psychoactive substances* (NPS) has been evolving since the end of the last decade. The introduction of concepts of *evidence-based Medicine* led to a revolutionary growth of all fields of medical research. The enhancement of quality of research was also paralleled by the development of tools for critical analysis of the published literature.

The aim of our evidence-based analytic study was to assess the NPS research output by means of evaluation of the level-of-evidence and the implemented statistical analyses. An extensive database of near 600 published manuscript was created; the manuscripts were selected from the PubMed/Medline database by using pre-specified keywords in combination with Boolean operators. Each manuscript was systematically scanned for; 1st author, research institution, country, year of publication, type of study, statistical analysis, level-of-evidence, and journal of publication. Research efforts from the Middle East were observed, quantified, and geo-mapped.

It was confirmed that teams of NPS researchers included members in the range of one to 29, with and an average of 4.75 per publication. Research output was densely mapped in the developed countries including, UK (53%), US (19%), Italy (14%), Germany (14%), and Sweden (10%), while the Middle East contribution was minimal (<1%). The top two research institutes were; King's College Lonon (UK) and Sapienza University of Rome (Italy). Studies included; Observational cross-sectional (15%), Review (18%), and Analytic chemistry (36%).

A considerable number of publications (34%) had no statistics at all, while only 14% had inferential statistics. Top journals of publication were; *Journal of Psychopharmacology, Current Neuropharmacology, Drug and Alcohol Dependence, Human Psychopharmacology.* To be concluded, the research output should always be assessed for quality control purposes. This study deployed an innovative and systematic method of critical analysis of literature; future studies should be respondent to this study to achieve a better quality of research.

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