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Letter to the Editor

# Pressure to publish in the biomedical scientific field: Ethical conflicts or a possible obsessive-compulsive disorder?

*Dear Editor,*

Some author recently reported that pressure to publish in the scientific biomedical field may push down research quality and should debase any editorial policy that aims at discouraging competing interests [1]. Actually, the largest widespread availability of many bibliometric data in indexed databases, often provided by Elsevier, Thomson Reuters ISI and Google Scholar, prompts researchers to obsess about their scientific productivity and impact, often comparing their numbers with those of other scientists worldwide [1]. According to Daniel Sarewitz, co-director of the Consortium for Science, Policy and Outcomes at Arizona State University, USA, current trend in writing and submitting scientific reports is drowning any good attempt of excellent science in the noise of the obsessive compulsion to rise productivity and added that “rising quality can thus emerge from declining scientific efficiency and productivity”, suggesting to publish less and less often [1]. Actually, this inflating attitude may hide treacherous traps. Frequent occurrence in misconduct regards conflictual authorship, “salami” publications and an obsessive pulse to increase daily one's own publication endowment, reaching a number of reports greatly exceeding 1000–1400 papers for a single author, and main causes of these activities were identified as the pressure exerted by academia and the personal desire for social and professional development [2,3]. Particularly in those countries where competition among the different academic departments is quite completely driven to attract much more funds from Government on the basis of the scientific excellence, the “obsession” to gather a huge bulk of publications may represent a great concern for the quality of science [4]. Obviously, this compulsive attitude in contriveing any possible way to enhance the amount of indexed publications, may increase the risk to meet the many misconducts usually causing paper withdrawn [5]. On the other hand, Fanelli and Lariviére, by analyzing about 40,000 researchers' papers through the period 1990–2013, recently assessed that the individual publication rate never increased in the last century [6]. This apparent contradictory evidence might depend on the widest trend to join a coauthorship, in order to enhance the publication impact. Anyway, to produce a huge bulk of papers, e.g. a number greatly exceeding 1000–1400 reports for a single author in the biomedical field, one should think that these authors actually conceived that the majority of their published works (50–60%) would be papers containing no original data, such as Reviews, Letters, Commentaries, Editorials and so on, as these types of publications can reduce dramatically the time required for being published and may prevent reviewing-dependent delays [7]. A further fundamental percentage (20–30%) is usually represented by articles where the author is within a group of coauthors in an experimental original paper and a remaining 5%–10% by publications conducted using pre-existing available data (retrospective studies, meta-analyses, statistical surveys, analytical comparisons during the assay of new instrumentations or kits, and so on). An emerging evidence is that institutions and lab services, where a great deal of data are promptly available as coming from routinely admitted patients in the diagnostic run, such as clinical biochemistry, transfusional medicine, clinical chemistry, have the highest percentage of the most prolific researchers in the scientific publishing [6]. These structures can account on the numerous throughput technologies and equipment of which hospitals and health care services are endowed, and papers can be easily produced without the great concern of attracting sponsors for funding experimental research. Calculations made by previously reported papers, allow to report that a mean of about 116.4 papers/year, of which 63.7 (54.72%) represented by papers with no original data, can reach an amount of about 1400 papers throughout a period of about 25 years and a frequency/day of about 5–6 papers, considering the calculations retrieved from reviewing lag times, turn-around times in the editorial process, editorial failures (reject) and so forth [7,8]. If this trend should be targeted as an ethical valuable mission in an Academic Department, then universities may simply become a massive industrial machinery of scientific reports, often dismissing fundamental novelties such as the scientific discovery [1].

Actually, pressure of scientific publishing appeared to be a major goal of predatory journals, as the bulk of scientific publications, prior to their quality and impact, makes consistence in the apparent expertise of a researcher [9]. In this perspective, many prolific scientists and full professors are used to spread their daily work in indiscriminately boosting publication records elsewhere [2]. While some authors suggested the worrisome possibility of an obsessive-compulsive disorder easily occurring with this attitude [10], the more recent literature in the field has addressed this concern as the consequence of a raw competition to earn grants and funds, on the exclusive basis of how many publications and consequent citations you possess.

So, taking into account the provocative suggestion from Sarewitz, should science be exclusively confined into the hard boundaries of experimental research, publishing only true novelties in the field, original data with the highest impact on the wordwide community? [1]. Probably, this attitude might dampen the debate within the scientific community, which might be restricted to the oral speeches in the many congresses, progressively removing from the editorial interest any leading authorship expressed in publication types such as Reviews, Commentaries, Correspondence and Editorials. Therefore, the best advice is to support a correct balance between the experimental research and its related debate on published reviews, surveys, meta-analyses and comments. Usually, this balance should not exceed 10% of commenting articles [9].

Whatever pressure in publishing within the scientific community is considered, it could be appealing to hypothesize that writing and submitting about five articles/day might be considered an obsessive-compulsive disorder but actually this attitude comes easily from the willingness in enhancing one's own authorship impact. And probably, also according Sarewitz and others, this is the real ethical concern to be addressed in the next future [1,9].

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