

## Cachexia vs obesity: where is the real unmet clinical need?

Stephan von Haehling · Stefan D. Anker

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**Abstract** A striking discrepancy exists in the number of publications on obesity as compared to cachexia or wasting disorders. In PubMed, the number of entries that contain “cachexia” as a title word is only 1,825, whereas the number of entries for “obesity” in the title is 47,828, giving a ratio of 1:26 in favor of “obesity” publications. The difference in publication activities in these two fields has further broadened over the last years. Looking at guidance from national or international guidelines, PubMed analysis is even more depressing with 147 entries for obesity, but only four for cachexia. None of the latter provides guidance for the everyday care of cachectic patients. This publication activity is in stark contrast to the mortality impact of cachexia vs obesity at the time of diagnosis, which is at least 20 times higher for cachexia over the first 5 years. We assume, the mismatch is even bigger when it comes to public research support for these two medical conditions, which likely is a big part of the reason for this publication imbalance. Another reason may be that there is a perception bias in the research community, the public and hence also among healthcare providers and politicians as to what is important in medicine. We think, cachexia is at least as big an unmet need as is obesity. For shorter-term outcomes, cachexia is certainly a much bigger medical need than obesity. We hope that the current research efforts will change the situation for the better of our patients.

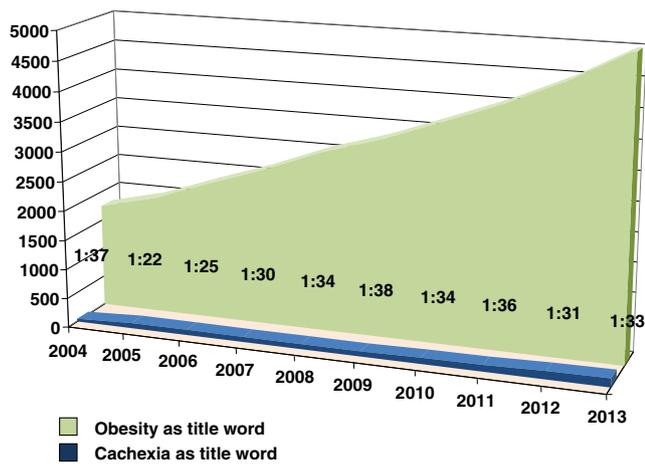
**Keywords** Cachexia · Obesity · Mortality · Prevalence · Morbidity

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S. von Haehling (✉) · S. D. Anker  
Applied Cachexia Research, Department of Cardiology, Charité  
Medical School, Campus Virchow-Klinikum, Augustenburger Platz  
1, 13353 Berlin, Germany  
e-mail: stephan.von.haehling@charite.de

This year’s 7th Cachexia Conference is taking place in Kobe, Japan, from December 9 through 11, and its realization emphasizes the fact that cachexia, sarcopenia, and other wasting disorders are important considerations across literally all disciplines of medicine. Looking at PubMed, however, it is striking to see that the number of entries that contain “cachexia” as a title word is only 1,825. Even though this number may appear high at first glance, this impression is dampened once looking at the number of entries for “obesity” in the title which is 47,828, giving a ratio of 1:26 in favor of “obesity” publications. One may argue in this context that not all researchers working in the field of tissue wasting use the term cachexia, but even the addition of the title words “sarcopenia” ( $n=647$ ) and “wasting” ( $n=2,170$ ) only decreases the ratio to 1:10 in favor of obesity suggesting that a huge unmet research need exists with regards to wasting disorders [1]. The discrepancy between publication activities in these two fields has seemed to attenuate for a few years but is recently broadening again (Fig. 1). Looking at guidance from national or international guidelines, the PubMed result is even more depressing. Indeed, while the search term “obesity [title word] AND guideline\* [title word]” yields 148 entries, the opposing search “cachexia [title word] AND guideline\* [title word]” yields only four entries, only two of which are real treatment guidelines [2, 3].

This publication activity is in stark contrast to the mortality impact of cachexia vs obesity at the time of diagnosis, which is at least 20 times higher for cachexia over the first 5 years of follow-up. We assume that the mismatch is even bigger when it comes to public research support for these two medical conditions, which likely is a big part of the reason for this publication imbalance. Another reason may be that there is a perception bias in the research community, the public and hence also amongst health care providers and politicians as to what is important in medicine. We think cachexia is at least as big an unmet need as is obesity. For shorter-term outcomes,



**Fig. 1** Number of PubMed entries for obesity or cachexia as respective title words with the ratio of cachexia vs obesity. Assessed on 15 October 2013 from [www.pubmed.gov](http://www.pubmed.gov). Values for 2013 are estimations based on publications on that date

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The *Journal of Cachexia, Sarcopenia and Muscle* aims to fill this obvious gap in publications. The journal was first published in September 2010 and was soon thereafter accepted for indexation in PubMed and PubMed Central. In September 2013, Thomson Reuters accepted the journal to be indexed and abstracted in Science Citation Index Expanded (SciSearch®) and in Journal Citation Reports/Science Edition, and we are therefore expecting the first impact factor to be published in June 2014.

We cannot emphasize enough how proud we are that the *Journal of Cachexia, Sarcopenia and Muscle* has been accepted for indexation and we are curious to learn what our first impact factor is going to be. Since September 2010, the journal continues to be published four times per year and has published 98 original articles (44 %), review articles (31 %), editorial comments (14 %), meeting reports (2 %), and letters to the editors (6 %). The remainders were errata and other

comments. According to Scopus [4], the 60 articles published in the journal between the first issue of 2011 and the last issue of 2012, have already been cited a total of 377 times, 244 of these citation have occurred in 2013. It is interesting to see that the three most cited articles stem from very different areas: wasting in chronic kidney disease [5]; body mass index and prognosis in chronic obstructive kidney disease [6]; and a double-blind, randomized, placebo-controlled trial of enobosarm in elderly men and postmenopausal women [7]—all cited 24 times each. Of importance is also that our self-citation rate in 2013 is <10 %.

Our “baby” appears to flourish well. Let us hope for the best, and please continue to submit your work to the *Journal of Cachexia, Sarcopenia and Muscle*.

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