Disease mongering is the selling of sickness that widens the boundaries of illness in order to grow markets for those who sell and deliver treatments. It is a process that turns healthy people into patients, causes iatrogenic harm, and wastes precious resources [1]. Disease mongering is the contemporary form of “medicalisation.” It is a process now driven by both corporate and professional interests, and it has become part of the global debate about health care. International consumer groups now target drug company–backed disease mongering as a wasteful threat to public health [2], while the global pharmaceutical industry has been forced to defend its promotion of “lifestyle” medicines for problems like slimming and sexual difficulties [3].

Two years ago, we helped organise the world’s first international conference on disease mongering in Newcastle, Australia, which coincided with a special theme issue of *PLoS Medicine* on the same subject [4]. The combination of these events sparked significant media interest around the world [5,6] and helped bring global attention to the problem of disease mongering. This attention has been sustained. Disease mongering increasingly appears in media analyses of medical conditions and new treatments. It has a page devoted to it on Wikipedia [7], and was recently the subject of a much publicised award-winning work of art [8]. In this short Essay, we report briefly on the inaugural conference, discuss its subsequent impact, and raise possible directions for academic inquiry and policy reform.

**The Inaugural Conference on Disease Mongering**

The three-day conference was attended by approximately 150 national and international delegates, including academics, consumer advocates, journalists, public relations experts, and health professionals. Combining plenaries and smaller sessions, the conference heard 44 presentations, including many examples of disease mongering that have subsequently received more public attention.

New York University academic psychiatrist Leonore Tiefer spoke about the involvement of drug companies in helping to foster the creation of a new condition called female sexual dysfunction [9]. Cardiff University psychiatrist David Healy charted the growing promotion of bipolar disorder and drugs to treat it [10], Dartmouth University researchers Lisa Schwartz and Steven Woloshin revealed how the prevalence of restless legs syndrome was being exaggerated to broaden markets for new drugs [11]. One of the most popular sessions of the conference was the opening plenary, which featured the fictional Professor Leth Argos discussing a satirical “new” disease called motivational deficiency disorder, said to affect up to one in five people worldwide [12]. Part of his presentation is available on YouTube [13].

The conference concluded with a short statement, communicated to the public via the media. It strongly supported the use of appropriate therapeutic and preventative treatments, but expressed concern that many therapies were increasingly being promoted for milder and milder conditions, leading to potentially unnecessary treatment, adverse effects, and wasted resources. The brief statement also called for research and policy action to help people recognise the signs of disease mongering, and thus enable the public to make more informed choices about their health.

**The Impact of the Inaugural Conference and the PLoS Theme Issue**

A systematic study of the impact of the conference and theme issue is beyond the scope of this short report. Notwithstanding our scepticism about the value of anecdotal evidence, and the inadequacy of surrogate markers, we feel there are reliable signs that disease mongering is now part of the global health debate. Within the media, consumer movements, and the professional and research communities, increasing numbers of people are formulating ways to confront the problem, in some cases forcing the pharmaceutical industry to respond.

In the United States, which is responsible for roughly half of all global spending on prescription medicines, a leading media watch organisation now routinely analyses health news stories for any signs of disease mongering [14]. Created in 2006 in the US, and inspired by similar organisations in Australia and Canada, HealthNewsReview.org (http://HealthNewsReview.org/) tries to encourage journalists writing about health not to contribute to the process of medicalising ordinary life [15]. The emergence of high-profile articles on the subject also suggests scepticism is building within the mainstream media. In covering a new drug called Requip—for “restless legs syndrome”—
In November 2007, disease mongering was a key subject of debate at the annual congress of Consumers International, an organisation involving 220 member groups in over 100 countries. Responding to the issue at that conference, the head of the International Federation of Pharmaceutical Manufacturers and Associations, Harvey Bale, conceded that there were examples of “egregious over-promotion”, but defended the industry’s capacity to ethically market medicines [18]. In Britain, the industry’s representative body has been forced to react directly to burgeoning media interest in the role drug companies play in expanding definitions of disease. In a two-page pamphlet for journalists, the industry points out that while the total number of diseases is growing, drug companies do not actually define them [3]. Similarly, Glaxo has denied that its promotion of a drug for restless legs syndrome is an attempt to turn healthy people into patients [19]. In the academic arena, several developments suggest an increasing interest in this phenomenon. In Scotland last year, at a conference at the University of Strathclyde on Communication and Conflict, researchers and academics from around the world gathered to debate disease mongering, as they had in Newcastle a year before [20]. In Spain, a group of researchers based at the University of Alicante are studying the phenomenon and its effects on the quality of life. Elsewhere, the Australian Research Council, through its competitive grant processes, has funded a two-year study on disease mongering, which will be conducted by the authors of this paper [21].

The Australian project will investigate and describe several case studies of disease mongering, and we plan to disseminate our results via published articles and video material. Significantly, the approach will combine academic inquiry with investigative journalism. While we argue that the phenomenon of disease mongering demands more academic attention, such inquiry throws up major methodological challenges. To begin to address these challenges, the first phase of the research will be devoted to establishing a sound operational definition of disease mongering before moving to the careful selection of cases for detailed study. Part of the problem is the sheer magnitude of the marketing effort in an industry that spends almost 25% of its sales on promotion—almost twice as much as it spends on research and development [22]. The process of extending the boundaries of illness involves many differing marketing strategies, including television advertisements for lifestyle drugs, drug company-sponsored creation of disease awareness campaigns, and the funding of patient and physician groups. Describing the size of the problem, and measuring its impact on physician behaviour or health outcomes, while desirable, may prove extremely difficult.

Future Directions

As public interest in the corporate-sponsored creation of disease grows, the need for a central database or resource library is becoming clearer. A credible Web site attached to an academic or advocacy group featuring case studies and other information on disease mongering could prove very valuable. Already some groups, including Healthy Skepticism (http://healthyskepticism.org/), have devoted space to this debate, and others are likely to follow.

While we have noted some signs of media, consumer, and academic debate and action about the problem of disease mongering, we are not aware of a similar increase in policy interest or action. In fact, to the contrary, there is some evidence of complacency about disease mongering on the part of regulators. The US Food and Drug Administration’s recent proposal to relax restrictions on off-label marketing risked setting the conditions for disease mongering to flourish [23]. Unnecessary medicalisation and medication may be wasting many precious health resources, with obvious opportunity costs for private and public health insurers alike. Producing credible estimates of the magnitude of those costs is a future direction that should be urgently pursued.

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