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Abstract

The phrase “disease mongering” has become a prominent feature of the wider critique of pharmaceutical marketing. Disease mongering refers to drug companies’ involvement in informing the lay public and health professionals about the illnesses targeted by their products. Typically, drug promotion is claimed to intentionally distort perceptions of the seriousness or treatability of disease or condition to sell drugs. The main concern is that drug promotion results in excessive drug demand. “Disease mongering” is clearly aimed at drug companies, however, the phrase reaches further and extends to us all with its often implicit critical commentary on contemporary social life. In this report, describe the results of an interview study with critics of pharmaceutical marketing. We explore what disease mongering implies or assumes about the contemporary world, particularly the doctors and consumers who inhabit it, and why such a critique is considered necessary. The potency of the drug promotion, the hubris of doctors the susceptibility of consumers were the main themes interpreted in the data. The disease mongering critique can be seen as part of a more general critique of the processes of “biomedicalisation” and “pharmaceuticalisation.”

Keywords

Disease Mongering, Pharmaceutical Marketing, Biomedicalisation, Pharmaceuticalisation, Grounded Theory

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Potency, Hubris, and Susceptibility: The Disease Mongering Critique of Pharmaceutical Marketing

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The phrase “disease mongering” has become a prominent feature of the wider critique of pharmaceutical marketing. Disease mongering refers to drug companies’ involvement in informing the lay public and health professionals about the illnesses targeted by their products. Typically, drug promotion is claimed to intentionally distort perceptions of the seriousness or treatability of disease or condition to sell drugs. The main concern is that drug promotion results in excessive drug demand. “Disease mongering” is clearly aimed at drug companies, however, the phrase reaches further and extends to us all with its often implicit critical commentary on contemporary social life. In this report, describe the results of an interview study with critics of pharmaceutical marketing. We explore what disease mongering implies or assumes about the contemporary world, particularly the doctors and consumers who inhabit it, and why such a critique is considered necessary. The potency of the drug promotion, the hubris of doctors and the susceptibility of consumers were the main themes interpreted in the data. The disease mongering critique can be seen as part of a more general critique of the processes of “biomedicalisation” and “pharmaceuticalisation.” **Keywords:** *Disease Mongering, Pharmaceutical Marketing, Biomedicalisation, Pharmaceuticalisation, Grounded Theory*

Introduction

Disease mongering is a pejorative term used by critics to refer to (patent rather than generic) drug companies’ involvement in informing the public and professionals about the illnesses targeted by their products (Applbaum 2006; Healy, 2004, 2006; Heath 2006; Moynihan & Cassells 2005; Moynihan, Doran, & Henry 2008,). Typically, a drug company is accused of misshaping perceptions of a disease or condition, or more pertinently, the perception of what is “normal” and what is not and what therefore should be treated (Angell 2004; Buckley, 2004; Caplan & Elliot 2004; Mintzes, 2006; Moynihan, 2002, Moynihan, Heath, & Henry 2002; Triggles 2005). Critics’ main concern is that the marketing or “branding” of a condition creates excessive drug demand – with many people using a drug that they don’t need, won’t help them or could even make things worse (Heath, 2005, 2006; Mansfield, 2006, Moynihan & Cassells 2005; Moynihan & Henry, 2006).

Disease mongering has been defined as “extending the boundaries of illness” (Moynihan, Doran, & Henry, 2008) and may involve the pathologising of normal human variation, the depiction of risk factors as diseases or the invention of a new disease (Brody & Light, 2011; Grob, 2010; Meyer, 2003; Moynihan, Heath, & Henry, 2002; Payer, 1992). Critics cite numerous examples disease mongering involving conditions that used to be viewed as inconveniences, as a normal part of the aging process or social issues rather than diseases (Dear & Webb 2007; Moynihan, 2002, 2010; Moynihan & Cassells 2005; Moynihan, Heath, &

Henry, 2002; Moynihan & Henry 2006). These include: mild forms of depression and anxiety, ADHD, social anxiety disorder, intermittent explosive disorder, attention deficit disorder, irritable bowel syndrome, restless legs, low bone mineral density, hypercholesterolemia, erectile dysfunction, pre-diabetes, prehypertension, premature ejaculation and female sexual dysfunction (Brody & Light 2011; Halasz, 2004; Hartley, 2006; Mintzes, 2002; Moynihan, 2003; Tiefer, 2006, 2007; Woloshin & Schwarz 2006).

Critics do not deny the existence of these disorders, the severity of symptoms or the value of medical treatment for many sufferers. What is argued is that each reflects a problematic widening of disease definitions that ultimately enables and legitimises medical intervention for as many people as possible (Alonso-Coello, Garcia-Franco, Guyatt, & Moynihan, 2008; Barbui & Tansella 2005; Doran & Henry, 2008; Herxheimer, 2003; Medwar, 2001; Verdous & Cougnard, 2003). Expanding the reach of a condition is problematic where it creates unwarranted concern (Heath, 2006), unnecessary use of medical services and technologies (Moynihan & Cassells, 2005), wastes resources on trivial lifestyle conditions or risk factors (Lexchin, 2001) at the expense of more serious diseases (Freemantle & Hill, 2002; Heath, 2005; Mintzes, 2006; Moynihan, Heath, & Henry, 2002) unnecessary patient exposure to risk; and the narrowing of treatment options to saleable products (Moncrieff, Hopker, & Thomas, 2005; Lexchin, 2006; Tiefer, 2007; Tracey, 2004; Woloshin & Schwarz 2006). The potential to prompt excessive use of medicines makes disease mongering a significant public health problem (Buckley, 2004, Moncrieff, Hopker, & Thomas 2005).

Although a relatively new idea in public discussion about pharmaceutical demand and public health, “disease mongering” has gained considerable currency (Moynihan, Doran, & Henry, 2008). Disease mongering frequently appears in commentary on pharmaceutical marketing in the popular news media (commonly “scare-quoted” or italicised) but is particularly prominent in the medical and public health professional media. Disease mongering has been the subject of an academic conference and the theme issue of high impact medical science journal (PLoS Medicine, 2006). The phrase has been discussed in the pages of the New York Review of Books (Angell, 2004) and has significant internet presence through Wikipedia and in the commentary of numerous blogs. There is some evidence that disease mongering has become something more than a handy journalistic trope. The prominence given to disease mongering in the conclusions of a UK Parliamentary inquiry (House of Commons, 2005) suggest significant conceptual traction.

To help illustrate the concept of disease mongering and the traction it has gained, we draw the reader’s attention to an artistic parody of drug promotion (see Figure 1). In 2007, New York’s Daneyal Mahmood Gallery exhibited “Havidol” a work consisting of faux advertisements for a fictional prescription drug for an equally fictional condition – Dysphoric Social Attention Consumption Deficit Anxiety Disorder. The Havidol (have-it-all) parody generated extensive international public attention for both the artist, Australian Justine Cooper, and the target of her satire – pharmaceutical promotion and disease mongering. The glossy, attractive advertisements of the exhibition are notable for not only capturing the slick and persuasive presentation of drug advertising but for artfully voicing the critique; drug promotion sells the sickness as well as the (putative) remedies.



Figure 1 (<http://www.havidol.com/> reproduced as ‘fair use’)

The Havidol parody is an artist’s impression of drug promotion and a commentary on the role of medicines in contemporary social life. However, the art work also shows an element of the disease mongering critique that is often left implicit in academic writings. While the Havidol parody, like the wider disease mongering critique, is clearly aimed at drug companies, the artist made it clear that the parody extends to us all and the “culture of consumerism” and pursuit of “a life without pain, only gain” (Mahmood, 2007). The caption “When more is not enough” suggests that the seller is pitching to a grasping public, never satisfied, always wanting more.

The published disease mongering literature mostly consists of the descriptive reports and critical commentary on cases of (alleged) disease mongering; cases of aggressive product promotion and general critiques of pharmaceutical promotion. These reports and commentaries often make a limited reference to contemporary cultural and political economic conditions and the kind of people that we have become. In focussing on the marketing activities of drug companies, claims about consumers and their medicine related behaviours are left indistinct, although like the Havidol parody, somewhat negative.

As part of a larger study looking at the regulation of pharmaceutical promotion, we wanted to explore how critics of drug promotion conceptualise consumers and contemporary medicine use. Rather than rely solely on the published literature, we supplemented our review by interviewing some of the authors of the disease mongering critique. In this report we use critics’ extempore description and explanation of disease mongering to develop a theoretically cogent interpretation of what disease mongering implies or assumes about the contemporary world, particularly the doctors and consumers who inhabit it, and why such a critique is considered necessary.

Study Context

Our interest in disease mongering arose from our general research interest in Australia’s pharmaceutical regulatory arrangements particularly those policies aimed at influencing consumer behaviour, for example, Australia’s system of universal pharmaceutical insurance (the Pharmaceutical Benefits Scheme) and its cost sharing requirements. As health social

scientists our research presupposes that consumer oriented pharmaceutical regulation is importantly connected to how consumers are *believed* by regulators to act in regard to medicines. This reflects a basic sociological premise that our understandings and values give us all, policy makers as well as consumers, our reasons for action.

In this study we undertook to more closely examine some of the claims that are made about consumers; in how consumers are presumed to behave, or to put in social scientific terms, how consumers are *constructed* as medicine users. Disease mongering, which had become a prominent element in discussion of Australia's drug promotion policy, provided our entry point to exploring the ideas about consumers and their prescription medicine related behaviours. Ideas such as disease mongering make (or refer to) important empirical, normative and material claims about the world and how people think and behave. Our investigation starts with scrutiny of the labelling itself and by talking to the critics who use the phrase, gain a better understanding of the criticism and its claims.

Methods

An interview study was undertaken with analysis of the data following the techniques of grounded theory (the version developed by Strauss & Corbin, 1998), such as coding and constant comparison to identify and relate emergent themes. Our choice of approach was pragmatic, with grounded theory offering a well-developed interpretive methodology for systematic qualitative analysis. Our analysis does not represent the fullest expression of grounded theory; we did not attempt to develop a novel, inductive theory from our data. While some grounded theory researchers emphasise conclusions being inductively drawn from the data, it does not exclude developing explanations by articulating insights drawn from new empirical studies with existing theoretical positions, in this study the theoretical concept of pharmaceuticalisation.

The project received ethics approval from Human Research Ethics Committee at The University of Newcastle (approval number H-2008-0071).

We wanted to talk to authors who had published, presented or publicly commented on pharmaceutical promotion and disease mongering. A list of potential participants was drafted using existing published literature and current contacts. The literature search involved searching for the key search term 'disease mongering' in Medline, PreMed, Embase, Psycinfo, CINAHL and Scopus databases. Relevant literature was also found through the reference lists of relevant books and journal articles. As one prominent and much published commentator on disease mongering was associated with the research team, this individual was excluded from participation.

We contacted potential participants via email, providing them with an outline of the study and an invitation to participate. All of those we contacted agreed to be interviewed. Once the participant had returned a signed consent form, a time for the interview was arranged. The consent form indicated that the participant's personal information would remain confidential to the researchers.

We interviewed 18 authors, academics and activists (many all three) who had either written on disease mongering or were recommended to us by someone who had. The interviewees were located in the Asia, Australia Canada, Europe, the United States and the United Kingdom. We ceased recruiting new participants at the point that we believed we had reached 'redundancy' i.e. limited new and relevant information would be likely to emerge from further interviews.

We conducted the interviews by telephone or via Skype. We digitally recorded all interviews with the permission of the participants and verbatim transcribed the recordings as soon as possible after the interview. We used a schedule of general topics (phrased as open-

ended questions) to be covered in the course of the interview, for example: How would you define disease mongering? Why does disease mongering happen? How does disease mongering differ from the ‘legitimate’ raising of disease awareness by the pharmaceutical industry? What are the consequences of disease mongering? Is disease mongering always effective?

As relevant topics and questions were broached by either the interviewer or the participant, we asked probing questions to elicit further detail and clarification (Rice & Ezzy, 1999). At the conclusion of each interview, our understanding of the interviewee’s views was reflected back to the interviewee as a rudimentary check on validity. Interviewees were encouraged to advise if anything had been misunderstood, misinterpreted or overlooked (Rice & Ezzy, 1999).

Our analysis of the data involved a process of conceptual categorisation, similar to the techniques applied by “grounded theory” advocates such as Strauss and Corbin (1998) and Clarke (2003). The analysis was an interpretive and iterative process of identifying and grouping (“coding”) concepts that constitute the descriptions and explanations of disease mongering and associated phenomena. Concepts that are interpreted as significant within and across texts are analysed, compared and possibly further categorised at a higher level of abstraction, in this study as themes. Our conceptual categorisation was developed with reference to a more general interpretative framework “pharmaceuticalisation.”

The steps taken to strengthen the credibility of our analysis followed the guidelines provided by grounded theorists (Charmaz, 2006; Corbin & Strauss, 2008). We interviewed informants active in pharmaceutical promotion debates and intimately familiar with the concept of disease-mongering and the marketing practices it critiques. Our interview guide was wide-ranging and flexible with interviewees free to move the discussion in any direction they felt was relevant and interesting. At the conclusion of each interview, our understanding of the interviewee’s views was described to the interviewee allowing him or her to clarify or correct.

Data coding was undertaken by each of us independently reading and categorising the interview data, comparing and discussing interpretations and developing a coding scheme. We then applied the coding scheme independently to all interviews with frequent checks for consistency. We regularly met to discuss the results the concepts and themes emerging from our coding and memo-ing. We extensively revisited the interview data to apply new codes and confirm our developing interpretation. We took care to be reflexive, with our interviewing and our interpretation of the data being accompanied by us reflecting on and discussing our present understandings and how these might influence our questions and findings.

The Results section of our report contains numerous segments of data, i.e. quotes from the interviews, to illustrate concepts and themes and allow the reader to follow, assess and evaluate our interpretation of interviewee’s descriptions and explanations of disease mongering.

Results

The results detail some of the common descriptive features of the accounts – how disease mongering is defined, how interviewees characterised each of the major actors and contemporary political, economic and cultural circumstances. We first present how interviewees define disease mongering and then present the three main themes from our analysis – the potency of pharmaceutical marketing, the hubris of doctors and the susceptibility of consumers. These themes represent the main axes of interviewee’s explanations for the problem of disease mongering and why policy and regulation of drug promotion should better account for it.

Defining Disease Mongering

There [will always be] death and suffering and there will always be people offering to alleviate it. Some of it will be good some of it will be nonsense but most of it will be lucrative.

All of the interviewees described disease mongering as an increasingly prominent element of the “nonsense” frequently involved in selling medicines. The interviewees claimed that almost any ‘ill defined’ but measurable physical or mental state presents an opportunity for a drug manufacturer to start “pushing the boundaries of a diagnosis” or for “creating diseases or magnifying the importance of diseases.” Depression, anxiety, shyness, attention deficit disorder, irritable bowel syndrome, restless legs, osteoporosis, erectile dysfunction, premature ejaculation, female sexual dysfunction, hypertension, pre-menstrual syndrome, high cholesterol, menopause, insomnia, pre-hypertension, pre-diabetes, over-active bladder, baldness – were all cited as examples of physical and mental states that had been subjected to “nonsense” and mongered.

While not denying the suffering that these conditions may entail, the interviewees all believed that, as one interviewee put it “broad spectrum conditions, ill-defined and easily confused with day-to-day trials and tribulations of life” are ripe for mongering.

The things that will get mongered...are things that can be measured and where it can be put to us that our measurements are falling outside some norm, great pressure can be put on us to try and get ourselves back inside the norm.

Almost anything is measurable on some scale or another. Once measured, what is “normal” can be defined, and what is otherwise and should concern you can be communicated.

What I see every single day is the widening of the definitions of raised blood pressure, the cholesterol obsession, bone density obsession, all things that might harm you in the future but you’re perfectly well now but you’re obsessing about these things...People spoil the health they have by worrying about [it].

Disease mongering may involve nonsense but to the interviewees it is pernicious nonsense. The elasticity of “normal” allows for the pathologising of natural human variation. Interviewees were all concerned that essentially healthy bodies and minds are turned into problems thereby creating dissatisfaction, worry and unhappiness.

[Disease mongering] is a little bit like the war on terror where you keep the population worried the whole time...you profoundly change the meaning of human experience...the natural and spontaneous ways that we go about our lives are being dissembled by the pharmaceutical industry and all the different people who can make money out of making us unhappy with bits of our functioning.

For all interviewees, what disease mongering is most pointedly criticising is that the sowing of discontent misleads people towards treatments and in doing so needlessly exposes them to medicines of uncertain benefit and possible harms.

Misleading people to the effect that people who were content with their lives are now unhappy about themselves and motivated to take treatments that will do them more harm than good.

Another issue of major concern for interviewees was that disease mongering deflects attention and effort from illness prevention in favour of expensive treatments and diverts resources from more serious health issues to less serious even trivial matters.

There are opportunity costs at a societal level, it is the focus of time and money and clinical gaze upon diseases that are mongered then there is a risk that things that are really causing greater suffering are ignored... If we waste money on medicines and treatments that are not truly relieving suffering, then that there are less resources available for other things that are.

For all interviewees, the central problem with disease mongering is that it distorts understanding and results in treatments reaching beyond those with the capacity to benefit to those who simply have the capacity to consume.

In many of the interviewees' accounts, disease mongering was linked closely to medicalization: "They're very similar; they each try and make part of the life-world a pathology or something in need of therapy"; however, as one interviewee remarked disease mongering is "a particularly pernicious...cynical...extreme and nasty variant of medicalisation." For some interviewees, in contrast to disease mongering, medicalisation may also result in a positive effect. People have benefited as some conditions have come under the medical gaze.

In the past twenty years the medicalisation of chronic pain has been a good thing, basically for patients and probably doctors as well. The pain medicine...it's a case of medicalisation, but I would be very hard to call it disease mongering.

By comparison, interviewees' accounts generally suggested the lack of any benefit of disease mongering for people's health and wellbeing.

Most of the best selling drugs and medicines don't treat proper diseases at all... they are drugs which could be kind of sunk to the bottom of the sea and we wouldn't be any the worse off.

Interviewees emphasised that disease mongering is about "creating a need" and that pharmaceutical companies are as adept at manufacturing need as they are drugs.

Disease mongering and the pharmaceutical industry

Pharmaceutical companies appeared in the interviewees' descriptions as an entirely known quantity. The following quotes prosaically state the obvious motive: "it's an industry...the main goal is to sell" and "drug companies focus on profit first and foremost." "Drug companies are in the business to make money." The interviewees recognised that the business of selling drugs is a highly competitive environment where the business edge lies in innovation but where it is also "much easier to market than to develop drugs."

[Disease mongering] happens simply because of market pressures...there is a finite number of sick people out there and pharmaceutical companies are

functioning in a very competitive market place and need to establish and expand market share for the products.

Citing factors such as declining productivity of the drug development pipeline, interviewees described marketing has having come to dominate pharmaceutical enterprise – with promotion becoming the area of its greatest creativity: “At present what you have is a great expansion of marketing innovation...a great effervescence of creative invention. I don’t think that that invention is the kind...that results in better [medicines].”

The focus on marketing and the vast resources devoted to it has seen drug companies develop into highly capable, subtle and sophisticated marketers willing to aggressively use whatever means it believes works. For all the interviewees, marketing inventiveness has increasingly turned to disease mongering. Bringing attention to and informing about a condition is often akin to “branding” the condition and, somewhat paradoxically, making it desirable. Changing perceptions of a disease can’t be achieved with pithy slogans and attractive imagery alone but relies on assuming the language and authority of medical science. As one interviewee described “It is important for (industry) to create a market...that appears to be valid and you do that by attaching it to scientific authority or medical authority.” For most interviewees, the sophistication of drug companies marketing is at its most insidious in this “pseudo-scientific approach” where the veneer of science is used to persuade people that they need a remedy.

Interviewees portrayed drug companies as potent, capable and determined. Most of the accounts told a story of powerful industry following the unambiguous imperative of profit. Industry appeared as determined in two senses, first, that drug companies are resolute in their pursuit of profit; and second, that because of ‘market pressures’ they cannot be otherwise. The very nature of pharmaceutical enterprise determines what industry does “As long as there is a pharmaceutical industry there will never be no disease mongering.”

All interviewees described drug companies as willing to use whatever means possible to sell drugs, including deceit. The historical record of egregious, self-serving behaviour by drug manufacturers (the Vioxx case, for example) was cited by interviewees support the claim. Few interviewees, however, were excessive in their criticism of pharmaceutical manufacturers (for example, only one of eighteen interviewees invoked the “snake oil salesman” stereotype).

In the interviewees’ accounts the profit motive means that industry promotion of a drug and the associated condition will only ever be framed to sell more drugs. The accounts contained an inventory of strategies and practices – advertising, educating, sponsoring, lobbying and collaborating, lobbying.

You have to work through opinion leaders and experts; you have to actually get them to come to the idea themselves. I think you do that by becoming partners with them and working with them.

The more subtle persuasion mechanisms are the ones in which there is an attempt to bring everybody on board, to build a consensus over the usefulness of a given drug...the main mechanism by which that takes place is through a common moralizing discourse...“Oh you are denying people treatment”.

Pharmaceutical marketing methods weren’t always described as subtle, with some interviewees expressing the belief that industry succeeds “By buying their way into the professional cabal.” For one interviewee, pharmaceutical companies “corrupt doctors, they corrupt politicians and they corrupt the media” in their attempt to define what is normal and what isn’t and should be treated.

Doctors and hubris

Doctors appeared in most interviewee's accounts as well-meaning but too easily manipulated. While serving the needs of patients should be and mostly is, the primary driver in their decisions, the desire for effective therapies and a general lack of scientific competency were cited as making doctors susceptible to the industry's marketing: "[Doctors] want to have things that they can help their patients with...they don't want to hear that the drugs really don't work." and "Doctor's themselves are brought to the point where they are influenced...most regular doctors being basically...poor scientists."

Doctors were described by some interviewees as having been: "completely co-opted by the pharmaceutical industry" with one interviewee claiming "At the moment Pharma sits like a shadow in the consultation room." While doctors were described by some interviewees as being "entangled" and sometimes "conflicted" through a variety of interactions with drug companies, the most consistent criticism was of doctors' overestimation of their capacity to establish the truth and to manage their relationships with industry: "It is normal for us to believe that it is only other people who get fooled...that 'delusion of unique invulnerability' is the key risk factor for being misled because when people are over-confident they don't avoid exposure."

In describing doctors and their role in disease mongering most interviewees' focused on their limitations. Doctors appeared as vulnerable to being influenced, less because of avarice or corruption and more because of hubris regarding their capacity to avoid being manipulated. Interviewees' expressed concern that doctor's sense of invulnerability blinds them to the potential of being misled. The pharmaceutical industry, the ever-present "shadow in the consultation room" isn't held by the interviewees to be a benign presence but an insidious co-opting force. Marketing claims presented as scientifically sound, a drug company can subdue a doctor's scepticism and move them to seeing their patient's every complaint as treatable.

Consumers and susceptibility

Consumers overwhelmingly appeared in interviewees' accounts as vulnerable: "Consumers are pretty much infinitely suggestible." and "We are very vulnerable to people who say to us, 'look, we have a way to help minimise the risks you are at'." The accounts suggested that people are "easy prey" to pharmaceutical marketing because they are preoccupied with but are generally poor evaluators of risk, particularly when it comes to their health. Interviewees referred to a tendency among people to reach too readily for a medical diagnosis and "to seek actively the pill for every ill" for what in essence are simply life's common travails. As one interviewee explained "Medicine offers us the way to control our health, our life expectancy, our futures, the futures of our children. The pharmaceutical industry offers these wonderful therapies, cures, solutions for ills that seem otherwise terrifying." For another interviewee, disease mongering works because it "plays on people's predisposition to accept that something is a medical problem and needs a medical solution...people seem very receptive to the idea that they are always suffering."

Other interviewees identified people's desire to have their ailments and problems legitimated, therefore avoiding blame for any perceived shortcoming.

They struggle with issues such as disorganization or forgetfulness or not getting things finished and so forth ...and they think that if they have it defined as ADHD then it's not really their fault it is this disorder; disease or dysfunction that they have and that maybe they can have that repaired by taking some kind of medication.

Many interviewees described people as wanting the quick and easy solution rather than alter their lifestyle: “It’s certainly easier sometimes to take a pill than change the way you are living your life.” Interviewees also identified people’s strong and limitless desire for improvement, to be “better than well”.

I don’t think people want to take medication just for the sake of medications... they think it’s going to improve their life in some kind of way...we’ve seen it with Prozac. When we see what Peter Kramer calls “people who are looking for drugs to make them feel better than well.

The desire to be better means people really want to believe their medicines will work and this can lead them to more readily believe messages about the efficacy of drugs.

By and large people will be concerned about getting an extra year of life. If they have this even potential promise of reducing their cholesterol which may extend their life if you or I walked into their home and said, ‘do you realize that the data in this is being misinterpreted by an industry to malevolently increase the sales of their drugs?’ I think most people would say ‘Look, yes that’s possibly true, but I’m in for a gamble here and I don’t want to be in a position of regret so therefore this is what I’m going to do’.

Many interviewees pointed to how being healthy is now something we value as goal unto itself and how our health is increasingly an expression of consumerism.

The world we are in now is a world where people say, whoopee, I have ADHD or bi-polar disorder or I’ve got raised lipids or whatever. People are wearing their diseases these days almost like a fashion statement.

Most interviewees indicated that consumers can be influenced with industry’s marketing strategies working through “simple” mechanisms such as saturated media exposure.

It’s a simple practice [to] convince the public...a number [e.g. a prevalence estimate] is repeated over and over again...people see it in the press, and they start to believe it, it has to be true because it has been repeated so many times.

People aren’t powerless as consumers or patients; however, an ‘empowered’ patient can work industry’s way “People themselves they are deciding about their treatments and... in some cases the consumers can also influence their physicians...to give them sort of drugs that they need.”

Interviewees’ descriptions of consumers focussed on their vulnerabilities – their anxieties about risk, their need for and trust in medical explanations, their preference for easy and quick solutions and their desire for health that can reach for ‘better than well’. It should be noted that, interviewees didn’t exclude themselves from this vulnerability and acknowledged that few people are immune to the dread of being sick or the desire to be better. While short of portraying people as passive dupes, interviewees did portray ‘consumers’ as vulnerable, ever anxious about their health and always open to new remedies.

Exposing disease mongering

Revealing the potential for vulnerable people (us all) to be exploited, was the principal rationale interviewees described as underpinning the disease mongering critique. As one interviewee explained: “those that realize and that use this term [disease mongering] have a responsibility to talk about it and to raise awareness in the wider public.” The interviewees spoke of raising awareness to create skepticism and help people resist the persuasiveness of drug marketing. Other interviewees described exposing disease mongering as the most effective way of changing industry behaviour “I do think that there is quite a lot that can be done to slow [disease mongering]down, to make it harder... is simply by talking about it... by naming and shaming basically.”

For some of the interviewees, exposure should be supplemented by strengthening regulation, particularly ensuring that penalties are sufficiently severe.

The appropriate punishment is some kind of costs, and there can be fines or there can be things like having a government enquiry and calling senior members of the company to spend a lot of time at enquiries so that they don't have time to make money.

Most interviewees identified improving the quality of information to consumers as the most helpful way to ‘combat’ disease mongering.

We should treat disease mongering as a contaminant information in the media as we treat micro-organisms in the water, or as we treat pollutants in the air...[The] health concerns in the nineteenth century (were) to have clean water for the people...the twentieth century...having clean air for the people, and now the priority is to have clean information for the people.

I guess the short answer is to get better information to consumers, and helping the consumers understand that they need to think twice about accepting diagnosis and any treatment.

Interviewees’ accounts justified the disease mongering critique along the lines of “muckraking,” the journalistic tradition of exposing the corrupt practices of the powerful. Disease mongering is the kind of phrase that gets people to take notice and all the interviewees believed the phrase usefully crystallised their concerns with drug promotion. Interviewee’s recognised the possible irony in ‘branding’ drug promotion as disease mongering but its rhetorical force makes the phrase appealing as one means of countering the pervasive messages of drug marketing.

Discussion

The interviewees descriptions of portray pharmaceutical companies, doctors and consumers in an unflattering light – industry is venal, doctors are over-confident and consumers too often credulous. Interviewees tended to emphasise the power and persuasiveness of industry in contrast to emphasising the vulnerabilities of doctors and consumers. Contemporary political economic conditions were mostly characterised as favouring pharmaceutical enterprise with the effectiveness of disease mongering arising from a social cultural milieu dominated by consumerism, and a preoccupation with being “better than well.” The interviewees’ main concern was that peoples’ understanding of health and illness is

increasingly constructed at the confluence of medicine and commerce and that too often our bodies, minds and moods are measured, normalised and problematised by an imperative to sell products.

Interviewee's descriptions and explanations of consumer behaviour did restate the major issues and themes of the disease mongering literature. That in contemporary society we are inundated with marketing for any and all consumer goods, creating and targeting our desire for more and more (De Graaf, Wann, & Naylor, 2005). Marketing focuses our attention on what we lack, rather than what we have and conditions us to address any imperfections with consumption (Applbaum, 2006). The rise of the commodification of health care has led medical treatments to become more like common goods and subject to market forces encouraging us to recast our self-perception from passive patient to active consumer (Conrad, 2005). While the transformation of patient to consumer can be empowering (Conrad 2005) and a moral gain (Moynihan & Smith, 2002) it can also have concrete adverse health effects. Healthy people consider themselves sick, take drugs they don't need, experience side effects and pay the costs for the medication without any benefit (Alonos-Coello et al., 2008; Caplan & Elliot, 2004; Dear & Webb, 2007; Gonzalez, 2010; Woloshin & Schwarz, 2006;). While a diagnosis may benefit those who are genuinely sick, the creation of "patients" who are not actually sick may create anxiety and side effects from treatment, thereby creating genuine illness outweighing any prospective value (Caplan & Elliot, 2004; Woloshin & Schwarz, 2006).

The accounts of interviewees reflect the concern with what Clarke et al. (2003) refer to as the era of "biomedicalisation." An extension of the more familiar concept of medicalisation, biomedicalisation is a term "for the increasingly complex, multisited, multidirectional processes of medicalisation that today are being both extended and reconstituted through the emergent social forms and practices of a highly and increasingly techno-scientific biomedicine" (Clarke et al., 2003) Where medicalisation extends medical jurisdiction over aspects of life not previously as illnesses, the process of biomedicalisation extends and commodifies this jurisdiction further over health itself (Clarke et al., 2003). Biomedicalisation emerges from a political economic and cultural environment characterised by a fusion of public and private interests, heightened sensitivity to risk and health, continuous advances in medical and information science and technologies and increased potential to transform bodies and identities (Clarke et al., 2003).

In a biomedicalised world, the management of not only illness but of "health" too rests with the individual, a responsibility loaded with a moral imperative to be ever better. To maintain an optimal healthy state an individual has to manage and assess their risks through continuous self-surveillance. Concurrently, the proliferation of more sophisticated biomedical assessment technologies has altered our perception of what it is to be normal and what risks we face. Technoscientific advances in biomedicine have "molecularised" and "geneticised" our bodies, expanding the range of what can be measured and worked on (Clarke et al., 2003). We are all always notionally "at risk" not just of illness and of not being normal but of not being better than we are.

Pharmaceuticalisation

The interviewees' accounts can also be seen in the light of a more recent sociological concept "pharmaceuticalisation" that more directly focuses on the social processes transforming ever more aspects of the life world into the prospects for pharmaceutical treatment (Fox & Ward, 2008, Williams Martin, & Gabe, 2011). The pharmaceuticalisation thesis asserts that pharmaceuticals (including over-the-counter products as well as prescription) have become part of our daily lives linking "the economics and politics of pharmaceutical production to the private lives of citizens" (Fox & Ward, 2008) Seen as an occasionally positive, but mostly

negative, consumer preference and choice for pharmaceuticals, pharmaceuticalisation highlights the increasing fusion of “the economics and politics of pharmaceutical production to the private lives of citizens” (Fox & Ward, 2008).

The pharmaceuticalisation thesis shares many of the concepts and concerns of disease mongering, medicalisation and biomedicalisation. Pharmaceuticalisation, like the disease mongering critique, gives the pharmaceutical industry a primary role in the expansion in range and use of pharmaceutical products. Pharmaceuticalisation theorists recognise that drug promotion (including disease mongering) is important in how pharmaceuticals have come to be such a pervasive aspect of health behaviour, but argue that disease mongering does not adequately account for the broader social and political-economic factors at play. Williams et al. (2011) contend that: “While disease mongering thus captures an important range of issues pertinent to the broader concept of pharmaceuticalisation, its analytic value is clearly restricted. Pharmaceuticalisation on the other hand, may or may not involve elements of disease mongering on the part of the pharmaceutical industry, though often this is not the case” (Williams et al., 2011).

The pharmaceuticalisation thesis, like biomedicalisation, places medicine and medical science as central to the expansion of what bodily conditions are to be regarded as candidates for treatment which pushes drug innovation into evermore areas of health; and beyond health into “enhancement” and into peoples “health futures” through the development of pharmacogenomics and pharmacogenetics (Abraham, 2010; Williams et al., 2011). A major difference between medicalisation and pharmaceuticalisation according to Abraham (2010), is that pharmaceuticalisation “can grow without expansion of medicalisation, because some drugs are increasingly used to treat an established medical condition involving no transformation of a non-medical problem into a medical one” (Abraham 2010).

Pharmaceuticalisation theory includes disease mongering and biomedicalisation but places these among a number of other key explanatory factors such as consumerism, the media and the ideology of the regulatory state that are “mutually interactive but competing in creating consumer demand for pharmaceuticals” (Abraham, 2010).

Pharmaceuticalisation theory gives a central role to the neo-liberalist ideas dominating the regulation and governance of pharmaceuticals, particularly the increasingly close relationship between regulators and manufactures that has resulted in a lowering of regulatory hurdles to allow manufacturers to “fast track” their patented medicines to the market often before they have been adequately proven as either safe or effective (Abraham, 2010a; Williams et al., 2011)

Williams et al, (2011) emphasise the contribution of the popular media to pharmaceuticalisation. Mediating the “(re)framing of health problems in the media and popular culture as having a pharmaceutical solution” (2011, page no.) lends a degree of validity to consumers regarding conditions and pharmaceutical treatments. While the media can tell negative stories about pharmaceuticals, there is a tendency for news reports to be ‘celebratory’ where pharmaceuticals are “treated as magic bullets for a range of day to day life problems” (Williams, Martin, & Gabe, 2011). Williams et al. view of “mediation” diverges slightly from the disease mongering critique in which the media are “co-opted,” seeing the media less as a catalyst and more as an amplifier of “selling sickness” (Williams, Martin, & Gabe, 2011). Although not a “puppet of pharmaceutical interests” (Williams, Martin, & Gabe, 2011) the media’s portrayal of pharmaceuticals may ultimately serve those interests by encouraging medicalisation and pharmaceuticalisation.

Pharmaceuticalisation theorists point to rising consumerism characterised by greater reflexivity, expertise and activism among patients. Pharmaceuticalisation involves the choices of the consumers who may regard themselves as “experts” and “information rich” and able to evaluate advertising claims about prescription drugs (Abraham, 2010b). This process

transforms needy patients to demanding patients. Abraham argues that the construction of patients as ‘experts amounts to the “ideological appropriation of patients’ needs as consumer demands” (Abraham, 2010a). This “expert patient discourse” largely serves the interests of drug manufacturers seeking to relax the bans on DTCA imposed by most nations. Williams and colleagues point out that the discourse of the ‘expert patient’ is not solely the “ideological appropriation” of consumers by the pharmaceutical industry but is also a feature of government policies encouraging consumers to be engaged in their health and treatment choices (Williams, Martin, & Gabe, 2011).

Another version of the pharmaceuticalisation thesis is offered by Fox and Ward (2008) who identify two major processes: the domestication of pharmaceutical consumption so that it becomes a part of daily routines and “life-style” marketing of drugs, both of which produce a situation where “pharmaceuticals come to be seen by consumers as a ‘magic bullet’ to resolve problems of daily life” (Fox & Ward, 2008) (almost identical wording to Williams et al., 2011). Fox and Ward focus on the opportunities that the internet generally, and the advent of outlets such as on-line pharmacies have created to bring pharmaceuticals directly into peoples’ homes (Fox & Ward, 2008).

With the easy reach of the internet, a consumer can readily access information on the condition and the drugs, and further, can bypass their doctor and obtain these drugs via online suppliers. The internet has transformed people from being passive recipients of medical care to being active consumers, to the point where, consumers are now “a key element in the pharmaceutical ‘distribution chain’, alongside physicians, academic opinion leaders, patient advocacy groups, public health bodies and ethicists” (Fox & Ward, 2008).

Although the various social processes are conceived of slightly differently, pharmaceuticalisation theorists converge on seeing the demand for medicine as created by social forces that include, but are not confined to, the activities of drug manufacturers. Drug promotion and disease mongering occur within a social context where public health authorities encourage people to be aware of their health and actively engaged in minimising risks. There is also a prevalent consumerist ethos that pushes people towards enhancing themselves through the consumption of (putative) drug innovations.

Recognition of broader social forces beyond drug promotion and disease mongering does not stop pharmaceuticalisation theorists from pointing their finger at drug manufacturers. Although Williams et al. (2011) maintain pharmaceuticalisation is a value neutral concept, it is clearly couched in strongly normative terms such as “colonisation” – a concept more generally seen to indicate exploitation of those being colonised, in this case consumers. However, in pharmaceuticalisation, drug marketing is only factor in the pharmaceutical “colonisation of the life-world” (Williams et al., 2011) where our everyday health related behaviours “from the bedroom to the kitchen” (Fox & Ward, 2008) and even our imagination (Williams, Martin, & Gabe, 2011) is caught by the promise of pharmaceuticals.

All of the pharmaceuticalisation theorists challenge the idea of the “expert patient.” While consumers are acknowledged to have greater access to information, particularly through using the internet, there is concern this simply incites demand without necessarily increasing sound knowledge and expectations of pharmaceuticals. The quality of information available to them (much of it produced by or influenced by drug manufacturers) may mean that these demanding consumers may not become as “expert” as they may think. While consumers may be more informed about medicines than in the past, their better knowledge gives them only a weak capacity to act as a countervailing force against the broader processes of pharmaceuticalisation (Busfield, 2010).

Limitations

Relatively short, one-off interviews are unlikely to elicit and catch the speaker's final word on the many aspects of the situation and the analysis does not exhaust interpretive possibility. While interviewees offered similar descriptions and explanations of disease mongering as a social process it is not suggested that they would agree on all relevant aspects of the wider situation. If the analysis emphasises interviewee's more negative views of the industry, doctors and consumers involved are presented, it is acknowledged that there was little in our questioning strategy to prompt positive views. That stated, our interviews did allow interviewees the opportunity to talk about any aspect they felt was relevant to disease mongering and pharmaceutical promotion more generally.

Conclusion

Disease mongering involves an implicit critical commentary on contemporary social life but this does not dissipate the force of its censure of pharmaceutical marketing. For the interviewees, one of the main objections to disease mongering is the restless dissatisfaction with ourselves that it plays on and exacerbates. Pharmaceuticalisation argues that this dissatisfaction emerges from, and reinforces, the more diffuse social processes of biomedicalisation and pharmaceuticalisation. Pharmaceutical marketing practices such as disease mongering (mis)shape understanding about what is normal and healthy but this also results from the focus on individual responsibility for managing health and risk promulgated by public health officials. The troubling net consequence is too much medicine. Opportunities both to the community and to the individual are lost by diverting attention to often less serious conditions while important conditions are neglected. This costs us materially but it also costs us subjectively, we can end up imagining our health futures to be reliant on pharmaceuticals.

References

- Abraham, J. (2010a). Pharmaceuticalization of society in context: Theoretical, empirical and health dimensions. *Sociology*, 44(4), 602-622.
- Abraham, J. (2010b). The sociological concomitants of the pharmaceutical industry and medications. In C. Bird, P. Conrad, & A. M. Fremont (Eds.), *Handbook of medical sociology* (pp. 290-308). Nashville, TN: Vanderbilt University Press.
- Alonso-Coello, P., García-Franco, A. L., Guyatt, G., & Moynihan, R. (2008) Drugs for pre-osteoporosis: Prevention or disease mongering? *British Medical Journal*, 336(7636), 126-129.
- Angell, M. (2004). *The truth about drug companies: How they deceive us and what to do about it*. New York, NY: Random House.
- Applbaum, K. (2006). Pharmaceutical marketing and the invention of the medical consumer. *PLoS Medicine*, 3(4), 445-447.
- Barbui, C., & Tansella, M. (2005). New generation psychotropics and the automatism of prescribing. *International Review of Psychiatry*, 17(3), 139-141.
- Brody, H., & Light, D. W. (2011). The inverse benefit law: How drug marketing undermines patient safety and public health. *American Journal of Public Health*, 101(3), 399-404.
- Buckley, J. (2004). Pharmaceutical marketing-time for change. *Electronic Journal of Business Ethics and Organisation Studies*, 9(2), 4-10.
- Busfield, J. (2010). 'A pill for every ill': Explaining the expansion in medicine use. *Social Science & Medicine*, 70(6), 934-941.

- Caplan, A., & Elliott, C. (2004). Is it ethical to use enhancement technologies to make us better than well? *PLoS medicine*, 1(3), e52.
- Clarke, A. (2003). Situational analysis: Grounded theory mapping after the postmodern turn. *Symbolic Interaction*, 26(4), 553-576.
- Clarke, A. E., Shim, J. K., Mamo, L., Fosket, J. R., & Fishman, J. R. (2003). Biomedicalization: Technoscientific transformations of health, illness, and US biomedicine. *American Sociological Review*, 161-194.
- Conrad, P. (2005). The shifting engines of medicalisation. *Journal of Health and Social Behaviour*, 46(1), 3-14.
- Corbin, J., & Strauss, A. (Eds.). (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Dear, J. W., & Webb, D. J. (2007). Disease mongering - A challenge for everyone involved in healthcare. *British Journal of Clinical Pharmacology*, 64(2), 122-124.
- De Graaf, J., Wann, D., & Naylor, T. H. (2005). *Affluenza: The all-consuming epidemic*. Oakland, CA: Berrett-Koehler Publishers.
- Fox, N. J., & Ward, K. J. (2008). Pharma in the bedroom...and the kitchen...The pharmaceuticalisation of daily life. *Sociology of Health & Illness*, 30(6), 856-868.
- Freemantle, N., & Hill, S. (2002). Medicalisation, limits to medicine, or never enough money to go around? *British Medical Journal*, 330(7342), 954-956.
- Gonzalez, C. M. (2010). Limitation of the diagnostic effort in paediatrics. *Journal of Medical Ethics*, 36(11), 648-651
- Grob, G. N. (2010). From aging to pathology: The case of osteoporosis. *Journal of the History of Medicine and Allied Sciences*, 66(1), 1-39.
- Halasz, G. (2004). Hidden truths: The politics of brain, mind and soul in Australian psychiatry. *Australasian Psychiatry*, 12(1), 3-10.
- Hartley, H. (2006). The 'pinking' of Viagra culture: Drug industry efforts to create and repackage sex drugs for women. *Sexualities*, 9(3), 363-378.
- Healy, D. (2004). Shaping the intimate: Influences on the experience of everyday nerves. *Social Studies of Science*, 34(2), 219-245.
- Healy, D. (2006). The latest mania: Selling bipolar disorder. *PLoS Medicine*, 3(4), e185.
- Heath, I. (2005). Who needs health care-the well or the sick? *British Medical Journal*, 330(7497), 954-956.
- Heath, I. (2006). Combating disease mongering: Daunting but nonetheless essential. *PLoS Medicine*, 3(4), 448-451.
- Herxheimer, A. (2003). Relationships between the pharmaceutical industry and patient organisations. *British Medical Journal*, 326(7400), 1208-1210
- House of Commons. (2005). *The influence of the pharmaceutical industry in Fourth Report of Session 2004-2005, House of Commons, UK*.
- Lexchin, J. (2001). Lifestyle drugs: issues for debate. *Canadian Medical Association Journal*, 164(10), 1449-1451.
- Lexchin, J. (2006). *Bigger and better: How Pfizer redefined erectile dysfunction*. *PLoS Medicine*, 3(4), e132.
- Mahmood, D. (2007). Daneyalmahmood.org. Retrieved from <http://daneyalmahmood.org/ArtistsPages/Justine/PastExhibitions/JustineHavidol.html>.
- Mansfield, P. R., Lexchin, J., Wen, L. S., Grandori, L., McCoy C. P., Hoffman, J. R.,...Jureidin, J. N. (2006). Educating health professionals about drug and device promotion: Advocates' recommendations. *PLoS Medicine*, 3(11), e451.
- Medewar, C. (2001). Promotion of prescription drugs: Trade tactics? *Consumer Policy Review*, 12(1), 18-30.

- Meyer, V. F. (2003). Medicalized menopause, U.S. style. *Health Care for Women International*, 24(9), 822-830.
- Mintzes, B. (2002). Direct-to-consumer advertising is medicalising normal human experiences. *British Medical Journal*, 324(7342), 908-911.
- Mintzes, B. (2006). Disease mongering in drug promotion: Do governments have a regulatory role? *PLoS Medicine*, 3(4), 461-465.
- Moncrieff, J., Hopker, S., & Thomas, P. (2005). Psychiatry and the pharmaceutical industry: Who pays the piper? *Psychiatric Bulletin*, 29(3), 84-85.
- Moynihan, R. (2003). The making of a disease: Female sexual dysfunction. *British Medical Journal*, 326(7379), 45-47.
- Moynihan, R. (2010). *Sex lies and pharmaceuticals: How drug companies are bankrolling the next big condition for women*. Sydney, Australia: Allen and Unwin
- Moynihan, R., & Cassels, A. (2005). *Selling sickness: How drug companies are turning us all into patients*. Sydney, Australia: Allen and Unwin.
- Moynihan, R., Doran, E., & Henry, D. (2008). Disease mongering is now part of the global health debate. *PLoS Medicine*, 5(5), e106.
- Moynihan, R., Heath, I., & Henry, D. (2002). Selling sickness: The pharmaceutical industry and disease mongering. *British Medical Journal*, 324(7342), 886-890.
- Moynihan, R., & Henry, D. (2006). The fight against disease mongering: Generating knowledge for action. *PLoS Medicine*, 3(4), e191.
- Moynihan, R., & Smith, R. (2002). Too much medicine? Almost certainly. *British Medical Journal*, 324(7342), 859-860.
- Payer, L. (1992). *Disease-mongers: How doctors, drug companies, and insurers are making you feel sick*. New York, NY: Wiley & Sons
- Rice, P., & Ezzy, D. (1999). *Qualitative research methods: A health focus*. Melbourne: Oxford University Press.
- Tiefer, L. (2006). Female sexual dysfunction: A case study of disease mongering and activist resistance. *PLoS Medicine*, 3(4), e178.
- Tiefer, L. (2007). Beneath the veneer: The troubled past and future of sexual medicine. *Journal of Sex and Marital Therapy*, 33(5), 473-477.
- Tracey, J. (2004). Between discourse and being: The commodification of pharmaceuticals in late capitalism. *The Communication Review*, 7(1), 15-34.
- Triggle, D. J. (2005). Vaccines, Viagra, and Vioxx: Medicines, markets, and money - When life-saving meets life-style. *Drug Development Research*, 64(2), 90-98.
- Verdoux, H., & Cougnard, A. (2003). The early detection and treatment controversy in schizophrenia research. *Current Opinion in Psychiatry*, 16(2), 175-179.
- Williams, S. J., Martin, P., & Gabe, J. (2011). The pharmaceuticalisation of society? A framework for analysis. *Sociology of Health & Illness*, 33(5), 710-725.
- Woloshin, S., & Schwartz, L. (2006). Giving legs to restless legs: A case study of how the media helps make people sick. *PLoS Medicine*, 3(4), e170.

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