Disease mongering
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ABSTRACT
Convincing healthy people that they are sick and require medicines can enormously expand the market. Disease mongering can turn ordinary ailments like baldness into medical problems, consider risk factors such as hypertension and osteoporosis as diseases and frame prevalence estimates to increase potential markets. In Asia, conditions like erectile dysfunction, male pattern baldness, attention deficit hyperactivity disorder and irritable bowel syndrome, and the drugs to treat them, are widely promoted. Fairness creams and traditional medicines are also widely used. The cost of disease mongering to the individual and the community is expected to be high. Some authors have argued that medicalisation of illnesses may not be a problem and the real problem may be the lack of medicines. Doctors will play a key role in combating disease mongering. Disentanglement from the pharmaceutical industry and development of a capacity for critical analysis are required. Educating patients and empowering them to make decisions are important. Several initiatives have been undertaken to combat disease mongering. Initiatives at the level of the patient and the physician are especially important. Studies on the extent and knowledge of disease mongering among doctors and medical students, and their economic and social consequences are urgently required.

Keywords: disease mongering, doctors, drug promotion, medical consumer, pharmaceutical industry

INTRODUCTION
Angell stated in an article that the pharmaceutical industry spends more money on marketing than on research and development.(1) The global pharmaceutical industry generated revenues of greater than US$364 billion in 2001.(2) The United States of America (US), Europe and Japan are the major markets for pharmaceuticals. During the year 2000, more than US$13.2 billion was spent on pharmaceutical marketing in the US alone.(2) Advertising and marketing practices in the pharmaceutical industry are similar to those in other industries,(3) and emphasise increasing markets for and maximising the use of their products. Aggressive marketing is not a new phenomenon. The 19th century manufacturers of patent medicines, dubbed “nostrum-mongers”, pioneered advertising, use of trademarks, demand stimulation strategies, and designed medical almanacs promoting disease awareness.(4)

DISEASE MONGERING
Convincing healthy people that they are sick and in need of medicines creates an enormous market for drugs and medicines. Medicalisation is the process of turning ordinary life events and its customary ups and downs into medical conditions.(5) Does a five-year-old who is unable to concentrate and finds it very difficult to sit still suffer from attention deficit hyperactivity disorder (ADHD)? Does a middle-aged male with occasional sexual difficulty suffer from erectile dysfunction (ED)? The concept of what is and what is not a disease at times can be extremely slippery.(6) Many of life’s normal processes like birth, ageing, sexuality, unhappiness and death can be medicalised. The term, “medicalisation”, became prominent in the 1970s through the work of Ivan Illyich, who wrote a book with a central theme that definitions of diseases were being broadened to increase demand for medical services and new drugs and other products.

Disease mongering can turn ordinary ailments into medical problems, see mild symptoms as serious, treat personal problems as medical ones, see risks as diseases, and frame prevalence estimates to increase potential markets.(7) A recent article states that disease mongering is the selling of sickness that widens the boundaries of illness and increases the market for medicines.(8) The term was first described by Lynn Payer in the 1990s.(9) Disease mongering is the opportunistic exploitation of a widespread anxiety about frailty and a faith in scientific advance and innovation.(8)

CREATING “AWARENESS” ABOUT ILLNESS
The industry has learnt to influence the prescribing behaviour of doctors indirectly and to use “opinion leaders” from the medical profession to promote their products.(9) “Illness promotion” involves using public awareness campaigns in the media to encourage people to
seek new treatments, and ensuring support to patient-help organisations. “Disease awareness” campaigns are linked to the marketing strategies of drug companies. Companies fund and facilitate disease awareness campaigns and consumer groups using their public relation and marketing departments. The media is targeted with stories and reports which create a fear about a disease or a particular condition and highlight the latest treatment.({7})

**VARIOUS STRATEGIES OF DISEASE MONGERING**

Ordinary life processes or ailments can be converted into medical problems. Baldness has been suggested as the classic example. In Australia, the public relations firm Edelman orchestrated coverage in newspapers suggesting that losing hair could lead to panic and emotional difficulties and can have an impact on job prospects and personal well-being.({7}) The second common strategy is to consider mild symptoms as portending a serious disease. This is exemplified by the case of irritable bowel syndrome (IBS). A mild functional disorder has been converted into a serious disease requiring drug treatment.({7}) Personal or social problems are being converted into medical ones. In Australia, the public relations company representing a pharmaceutical company claimed that one million Australians suffered from social phobia. The condition was described as soul destroying and antidepressants were recommended for treatment.({7})

Risk factors can be conceptualised as diseases. High blood pressure, raised cholesterol levels and osteoporosis have been suggested as examples.({7}) In the case of osteoporosis, drug companies have sponsored meetings to define the condition and have funded studies of treatments. Conceiving osteoporosis as a disease is ethically complex. Slowing bone loss can decrease the risk of future fractures. However, the risk of serious fractures in absolute terms is low, and long-term preventive treatment may offer only small reductions in risk.({9}) The link between bone density and the risk of fractures is the subject of controversy and reviews have pointed out that bone density may not be a sufficiently accurate predictor of fracture risk to guide therapy.({10}) However, the director of the National Osteoporosis Society of the United Kingdom had stated that treating osteoporosis would be effective to prevent the high cost of treatment of fractures.({11}) The personnel of Osteoporosis Australia had also challenged the view that osteoporosis may not be an accurate predictor of fracture risk.({12}) Disease prevalence estimates can be framed to maximise the size of a problem.({7}) ED is the classic example.

**“LIFESTYLE” DRUGS**

Recently, medicines are increasingly available for conditions which have so far been regarded as the natural result of ageing or as part of the normal range of human emotions. Drug treatment is also being made available for enhancing normal functioning.({13}) Sildenafil citrate is effective and safe for people with medical problems and who require treatment, but it can also be used by a much wider population. A recent article states that a pharmaceutical giant had conducted a powerful campaign to raise awareness of the problem of ED and to narrow down the treatment options to medication.({13}) Sildenafil citrate is also being tried for female sexual dysfunction.({14}) An important consideration is the reliability of studies of risk. Case-control studies often do not reliably identify moderate increases in risk.({15}) Most studies report relative risk reduction rather than absolute risk reduction and may lead to public anxiety and changes in lifestyle.

ADHD has emerged as an important childhood disorder. There have been furious debates on the definition of the illness and the cost-benefit ratio of treatment with psychostimulants.({16}) Conrad had argued that non-medical people play a key role in the process of disseminating understanding of a new illness when non-medical disorders are medicalised.({17}) In the case of ADHD, the role of the school teacher as sickness and treatment broker has been clearly elaborated.({18}) The DSM-IV criteria accords teachers a role in the diagnosis through the use of assessment instruments like the Conners’ Teacher Rating scale.({19}) A recent article states that patients and research participants with psychological problems are led to believe they have an abnormality/disease requiring medical intervention and biasing them against non-medical interventions.({20}) The pharmaceutical industry may play a key role in influencing teachers and directing them towards drug treatment for the disorder.

**FROM PATIENTS TO MEDICAL CONSUMERS**

Individuals in a free market economy visualise themselves as “free agents” with the power to choose goods and services. Pharmaceutical companies in developed countries try to convince the public that it is empowering to think of themselves not as patients but as consumers.({3}) Promoting consumer familiarity with medicines shows the broad influence of the pharmaceutical industry. Direct to consumer advertising (DTCA) is legal in the US and New Zealand and companies usually advertise only drugs that are profitable, usually expensive, new drugs for chronic disease conditions.({21}) Advertising aims to create or increase anxiety and/or unhappiness about symptoms or normal life experiences and high expectations of benefits from drugs. Drug advertising may aim to create a “medical consumer”.

**DISEASE MONGERING IN ASIA**

Asia is a vast continent and is fast becoming a major market for medicines. Different countries of the region
have been successful to varying extents in ensuring availability and accessibility of essential medicines. Lack of standard treatment guidelines in many parts of Asia may be a factor facilitating disease mongering; however, studies on this aspect are required.

Many countries have populations which lack access to essential medicines. India and China have powerful pharmaceutical industries. Japan, though geographically a part of Asia, is a developed market and will not be considered here. In India, more than 100,000 allopathic formulations are available. All over the world, drug companies have been known to sponsor key scientific meetings, hire leading researchers as consultants, fund continuing medical education (CME) programmes and create websites accessible to both doctors and patients. These activities are also prevalent in South Asia.

Conditions like ED, male pattern baldness, ADHD, IBS, and risk factors like hypertension and hypercholesterolaemia, are widely promoted in urban areas and also among the rural elite. Expensive skin preparations which peddle a concept of eternal youth and beauty, through the use of these preparations, may be considered disease mongering. An article argues that fairness creams peddle a racist, western ideal of beauty and may be considered as disease mongering. In Asia, traditional medicines are widely used especially for male pattern baldness, ED and to increase strength, potency and virility.

The Nepalese pharmaceutical industry is rapidly growing and the country also imports medicines mainly from India and Bangladesh. In Nepal, the cities are becoming booming markets for pharmaceuticals. Medical representatives are allowed free, unrestricted access to doctors and medical conferences are strongly dominated by the industry. Studies on the extent of disease mongering indulged in by pharmaceutical companies are lacking. A recent study in India had shown that pharmaceutical students were more aware of the problem compared to medical students.

ROLE OF ALTERNATIVE MEDICINE PRACTITIONERS AND BEAUTICIANS IN DISEASE MONGERING

Studies on disease mongering and the traditional focus on the topic have mainly targeted the pharmaceutical industry. However, in Asia and even in other regions, a number of other players are involved. Alternative medicine practitioners and unqualified healthcare providers often promise to treat disorders of sexual function and improve virility and vitality. They also make tall claims about treating sexually transmitted diseases. However, scientific proof for the efficacy of these products is lacking.

Beauticians and associated advertising agencies may promote an ideal body image, and then emphasise drugs and other treatments to attain and maintain the particular image. A youthful image is emphasised and treatments like botulinum toxin (botox) and others are promoted to maintain youth and beauty. These treatments are not free from adverse effects. A number of treatments for baldness are also promoted by alternative medicine practitioners. However, scientific studies on these products are lacking.

DISEASE MONGERING: THE OTHER SIDE OF THE COIN

There is a very thin dividing line between promoting knowledge and understanding of a disease, and disease mongering, in many instances. A psychiatrist recently stated that he is a disease monger. He teaches primary care doctors to identify bipolar disorder and takes money from the industry to do so. He uses the money to provide care for patients without insurance or money. Another article states that bipolar disorder definition has not been influenced by the industry. The author states that while the possibility of over-diagnosis of the disorder exists, the diagnosis is not invalid and the actual evidence shows that bipolar disorder has been largely undiagnosed or under-diagnosed.

However, the author of the original article states that disease mongering may not be creation of diseases de novo. He argues that disease mongering is where the interests of a medicine seller, who sells medicines by emphasising the existence of and risks of some condition, outweighs the likely benefits of the proposed treatment to persons suffering from the putative condition.

Another article states that large “grey zones” exist between disease and normality and this might help to explain the increased use of “lifestyle drugs” and self-prescription of psychiatric medication. Doctors should work more as decision facilitators for patients. The author argues that it may be absurd to decide on a concept of a disease and define who should be treated. There will always be “normal” people who will want treatment and “sick” people who will refuse it. An article in the British Medical Journal had stated disease awareness campaigns are likely to expand the market for drugs for a particular product but it will do so for the sponsor as well as competitor companies. The campaigns aim at making consumers aware that treatment may be available for this condition. The industry is working hard to develop new drugs for the benefit of humanity.

ECONOMIC AND SOCIAL CONSEQUENCES OF DISEASE MONGERING

Disease mongering can generate huge profits for the industry. In Nepal and India, the healthcare system is partly funded by the government, but the private sector also plays a huge role. With regard to the other Asian countries; in some, the government is an important
player; in others, the private sector is dominant; while some others have a mixed system. The role of medical insurance companies also varies across the continent. The majority of the population lack medical insurance and the capacity to pay for expensive medicines. The personal economic consequences of disease mongering may be high. Enhancement of personal attributes and function through the use of lifestyle drugs has been identified as a “growth market” by the industry. These, as already detailed, aim to create dissatisfaction with the present personal attributes and attempts to improve them through medicines. The disillusionment and disappointment if the results are not up to the hyped-up expectations have to be carefully considered.

New drugs aggressively promoted for created diseases may divert funds and attention from the treatment of infectious diseases and other important problems. Studies on the impact of disease mongering are required. The corporate sponsored creation of disease is likely to increase in the coming years.

**COMBATING DISEASE MONGERING: THE ROLE OF DOCTORS**

The first step to combating disease mongering has to be a genuine disentanglement of healthcare professionals from the pharmaceutical industry. Politicians interested in the welfare of patients and health of citizens should promote such independence. Doctors should be careful and avoid drug treatments for physiological states and life processes. Doctors should be careful while attending CME programmes which are sponsored by the industry.

Doctors should develop the capacity for critical analysis of journal articles and research reports, and should avoid being misled by biased presentation and interpretation of data. Critical appraisal skills should be developed during the undergraduate medical course. The Teacher’s Guide to Good Prescribing describes a facilitator’s checklist for evaluating published clinical trials. Critical appraisal skills and education about pharmaceutical drug promotion is taught in medical schools around the world. However, most teachers were of the opinion that the programmes were only somewhat successful. For medical doctors, the availability of independent sources of drug information is essential. The World Health Organisation publication “Guide to Good Prescribing” makes an inventory of available sources of information and describes choosing between the sources. Critical analysis of commercial sources of information and efficient reading are also highlighted.

Doctors and healthcare personnel should generate knowledge about disease mongering. Multi-site controlled studies of drug company-funded awareness campaigns are required. Academic investigation of the prevalence of disease mongering is required. Prospective studies of the launch of a new or recently expanded disease or condition are required. Family care physicians and general practitioners should be aware of and be involved in combating disease mongering.

Gillman has suggested that the medical profession should consider being more proactive with regard to the various problematic areas in their interaction with the pharmaceutical industry. The provision of unbiased high quality information is expensive. Jacobs pointed out that it should not be assumed that information originating from the industry is wrong only because the company stands to gain. Systems should be in place in Asian countries for provision of information. The information provision will be expensive and the financial modalities will have to be worked out.

**COMBATING DISEASE MONGERING: THE ROLE OF POLITICIANS AND GOVERNMENTS**

Politicians play a vital role in overseeing the organisation of society. Socioeconomic deprivation has been described as a “fundamental cause” of disease. Population approaches to tackling the fundamental causes of deprivation remains the most effective way of tackling inequalities of health. Regulating drug advertising and the relationship between doctors and the pharmaceutical industry can be considered. The government may fund organisations providing independent, unbiased information on medicines. Government regulatory agencies are working towards regulating advertising, especially DTCA. A recent article had discussed the question of whether regulatory agencies had sufficient political will to enforce the existing regulations governing drug promotion.

**INITIATIVES TO COMBAT DISEASE MONGERING**

Several tentative steps are being taken all over the world to understand and combat the problem of disease mongering. Health Action International has been concerned about the blurring of boundaries between ordinary life and medical illness to increase the sale of medicines. A few years ago, the *British Medical Journal* (www.bmj.com) had run a series of articles on disease mongering. In April 2006, the journal *PLoS Medicine* (www.plosmedicine.org) brought out a special issue on disease mongering. The issue was brought out to coincide with the first International Conference on Disease Mongering (www.diseasemongering.org) held at Newcastle, Australia from April 11 to 13, 2006. In Australia, a group called Media Doctor (www.mediadoctor.org.au) is investigating media stories on medicines to check whether the stories accurately report the nature and extent of disease or simply reiterate information from disease mongering campaigns.

Education of the public regarding diseases and
medicines is required. The public should be informed about common diseases and taught critical analysis of information. Illiteracy continues to be a major problem in parts of Asia and adult literacy programmes and universal primary education should be emphasised. The belief among the public that there is a pill for every ill should be debunked. Many chronic diseases are diseases of lifestyle, and lifestyle changes and non-pharmacological measures should be emphasised.

Doctors and other prescribers should be taught about critical analysis of information. They should develop a capacity for analysing the promotional material presented by the industry. Medical training, as already stated, should emphasise these points. Non-pharmacological measures and lifestyle changes for chronic diseases should also be emphasised. Prescribing skills and the pharmacoeconomic aspects of prescribing should be taught. A holistic approach to the patient and patient care is required. Studies on the extent of disease mongering in Asia and the roles of various stakeholders, like the pharmaceutical industry, alternative medicine practitioners and beauticians, are necessary. The economic impact of these practices should also be studied.

COMBATING DISEASE MONGERING: THE ROLE OF PATIENTS

With increasing levels of education and economic prosperity, patients should increasingly take greater responsibility for their treatment. They should be provided with and have access to information about their disease. The ultimate decision about whether or not to go in for drug treatment should be the patient’s. However, as illiteracy is still a big problem in many parts of Asia, what to do when the patient is illiterate has to be discussed.

CONCLUSION

Asia is a big continent with huge cultural and socioeconomic differences between countries. In certain populations, medicines are not easily available, while in others, over-medicalisation of illness may be present. In a free market economy, the pharmaceutical industry will naturally try to promote drugs used to treat illnesses in affluent populations. The pharmaceutical industry has and will continue to produce drugs to reduce human suffering. Doctors should develop the capacity to critically appraise industry sources of information and learn to optimise time spent with medical representatives. The undergraduate years of study are an important time to develop these skills. Training programmes for practising doctors can be organised. Provision of unbiased sources of drug and treatment information is important, and the economic modalities should be worked out. Patient education about drugs and disease is an important responsibility of doctors. Disease mongering is being practised in Asia. Studies on the prevalence and impact of disease mongering are required. Disease mongering may lead to wastage of scarce resources at an individual and community level. Doctors and other healthcare personnel should be aware about and be involved in combating this practice.

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