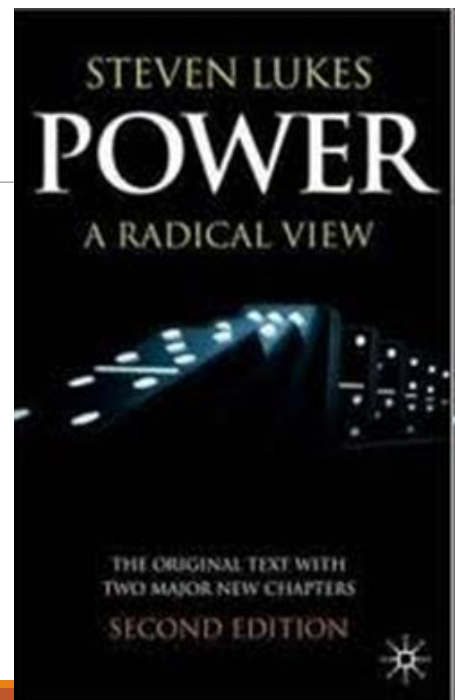


Health, Technology and Society

THE POWER OF EXPERTS AND THE (DIS)EMPOWERMENT OF PEOPLE:
THE MEDICALIZATION OF EVERYDAY LIFE

Conception of power as:

1. Decision making,
 2. Agenda setting and
 3. Preference shaping
- (Lukes, 2005)



“Dr. Knock (original title Knock) is a French comedy film from 1951, directed by Guy Lefranc, written by Georges Neveux, and starring by Louis Jouvet. It also features an uncredited appearance by Louis de Funès. The movie is based on the 1923 theatre play *Knock ou le Triomphe de la médecine* (Knock or The Triumph of Medicine) by Jules Romains.

The film was remade in 2017 under the title *Knock*.

The ambitious Dr. Knock arrives in the country village Saint-Maurice to succeed Dr. Parpalaid, a brave and honest man but whose customers are rare. The health status of the country is excellent. Realizing that he was duped by his predecessor, Dr. Knock is determined and successful in convincing everyone in good health that he or she is a patient who does not know. The result was immediate. The whole village is found in bed; the hotel is transformed into a clinic and even Dr. Parpalaid, who temporarily returns to his village, is worried about his health following the "diagnosis" of Dr. Knock, and also ends up in bed”.



(Excerpts from Wikipedia; image from IMDB)

“Are we over-medicalized?”

Reuters health editor [Ivan Oransky](#) warns that we're suffering from an epidemic of preposterous preconditions – pre-diabetes, pre-cancer, and many more.



Medicalization

Process of identifying a condition as a medical problem requiring a medical solution

Non-medical problems become defined and treated as medical problems or

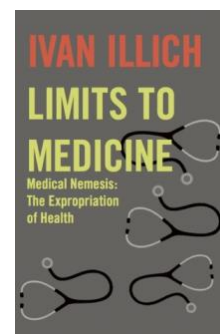
Process of *broadening* the definition of an illness (Conrad, 2013)

Earlier thinkers on medicalization: Ivan Illich
(image from Wikipedia)



He distinguished clinical, social and cultural iatrogenesis:
(see previous lecture)

“The medical establishment has become a major threat to health....A professional and physician-based health care system which has grown beyond tolerable bounds is sickening for three reasons: it must produce clinical damages which outweigh its potential benefits; it cannot but obscure the political conditions which render society unhealthy; and it tends to expropriate the power of the individual to heal himself and to shape his or her environment...” (1975)



“On a second level, medical practice sponsors sickness by reinforcing a morbid society that not only industrially preserves its defectives, but also exponentially breeds demand for the patient role....

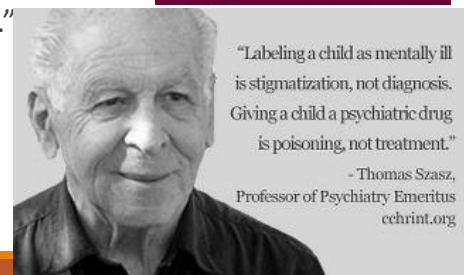
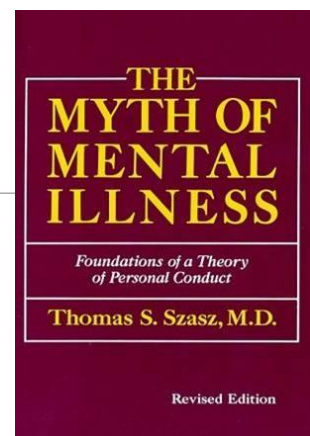
On the one hand defectives survive in increasing numbers and are fit only for life under institutional care, while on the other hand, medically certified symptoms exempt people from destructive wage-labour and excuse them from the struggle to reshape the society in which they live. Second level iatrogenesis finds its expression in various symptoms of social overmedicalization.” (p.27)

“Previously modern medicine had controlled only the size of the market, now this market has lost all boundaries. Unsick people came to depend on professional care for the sake of their future health. The result is a morbid society that demands universal medicalization and a medical establishment that certifies universal morbidity.” (p.60)

Earlier thinker on medicalization: Thomas Szasz

The myth of mental illness: “All **problems in living** are attributed to physicochemical processes which in due time will be discovered by medical research.” (Szasz, 1960, 1974)

Psychiatry is medicalization through and through....In short, medicalization is neither medicine nor science; it is a semantic-social strategy that benefits some persons and harm others....[The medical treatment of mental patients] still begins with the infringement of their personal freedom.” (Szasz, 2007).



DSM - *Diagnostic and Statistical Manual of Mental Disorders*

DSM edition	Year of publication	Number of mental disorders (depending on how you count)
DSM-I	1952	106
DSM-II	1968	182
DSM-III	1980	265
DSM-III-R	1987	292
DSM-IV	1994	297
DSM-IV-TR	2000	297
DSM-5	2013	157~335~392

”Diagnostic Inflation Out Of Control” (Frances, 2014)

- US: 20% in last year; 50% lifetime
 - Europe: 43% lifetime
 - New Zealand: by age 32
 - Anxiety disorder- 50%
 - Mood disorder- 40%
 - Substance dependence- 40%
 - US study: an amazing 83% of kids meet a DSM IV diagnosis by age 21
- (cited in Frances, 2014)

Attention Deficit Disorder- 3 fold Increase

New on-patent drugs

Direct-to-parent/teacher advertising

Too tight a link to school services

Fuzzy boundary with normality

Developmental issues- being born in Dec is risk factor (especially in boys) because they are more immature when start school

large class sizes

over-worked parents

“Neuroenhancement”

(cited in Frances, 2014)



“How could this possibly happen? There were six contributors:

1. wording changes in *DSM-IV*;
2. heavy drug company marketing to doctors and advertising to the general public;
3. extensive media coverage;
4. pressure from harried parents and teachers to control unruly children;
5. extra time given on tests and extra school services for those with an ADHD diagnosis;
6. and finally, the widespread misuse of prescription stimulants for general performance enhancement and recreation”.

(Frances, 2014: pp.128-9)




“ADHD is not something that a child *has*; rather it is something that a child *does*.” ([Hickey](#), 2015)



Childhood Bipolar Disorder - 40 fold
increase

Pushed by aggressive drug company
marketing to MD's
Direct to patient advertising
(cited in Frances, 2014)



Autistic Disorder- 20 Fold Increase

DSM IV inclusion of Aspergers

Too tight a linkage of the diagnosis to the eligibility for school services

Consumer advocacy

it has become fashionable to be 'Aspie'

(cited in Frances, 2014)



Adult Bipolar Disorder-2 fold increase

DSM IV added Bipolar II

Fuzzy boundary with unipolar


Thought leaders promote

Heavy drug company marketing

(cited in Frances, 2014)



Examples of medicalization in DSM-5 (2013)

- severe PMS: as Premenstrual Dysphoric Disorder
 - frequent temper tantrums: as Disruptive Mood Dysregulation Disorder
 - Grief to the loss of a loved one: as Major Depressive Disorder
 - Everyday forgetting of older people: as Minor Neurocognitive Disorder
 - Child and Adult Attention Deficit/Hyperactivity Disorder
 - Excessive eating once every week in 3 months: as Binge Eating Disorder
 - Worries of everyday life: as Generalized Anxiety Disorder
 - And many others... (see Frances, 2014)
- 

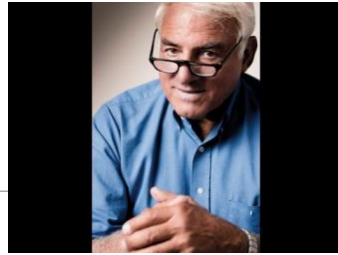
US National Institutes of Mental Health (NIMH) Director Thomas R Insel:

“The strength of each of the editions of DSM has been “reliability” [...]. The weakness is its lack of validity. Unlike our definitions of ischemic heart disease, lymphoma, or AIDS, the DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever.”

(Insel, 2013; cited in Pickersgill, 2013: 522)



Professor A.J. Frances, M.D.
 's critique of medicalization
 (image from Youtube)



“

The stakes were too high for me to ignore—both for the mislabeled new “patients” and for our society. Because of diagnostic inflation, an excessive proportion of people have come to rely on antidepressants, antipsychotics, antianxiety agents, sleeping pills, and pain meds. We are becoming a society of pill poppers. One out of every five U.S. adults uses at least one drug for a psychiatric problem; 11 percent of all adults took an antidepressant in 2010;¹ nearly 4 percent of our children are on a stimulant² and 4 percent of our teenagers are taking an antidepressant, **25% of nursing home residents are giving antipsychotics” (2014:xiv).**


Prior to 1970 (Conrad, 2013).

- Alcoholism
- Serious Mental Disorders
- Opiate Addiction
- Ageing
- Homosexuality
- Childbirth
- Child Abuse
- Hyperactivity
- Menopause
- Reproduction

Growth since 1970 (Conrad, 2013):

- Obesity
 - Anorexia
 - Adult ADHD
 - LD
 - Alzheimer's Disease
 - Infertility
 - PMS
 - Anxiety and Mood
 - OCD
 - PTSD
 - Sexual Abuse
 - Gambling
 - Erectile Dysfunction
 - Fetal Alcohol Syndrome
 - Sleep
 - Baldness
 - Idiopathic Short Stature
 - Sexual and Gender Difference
 - Risk
 - Etc.
- 

Case Studies

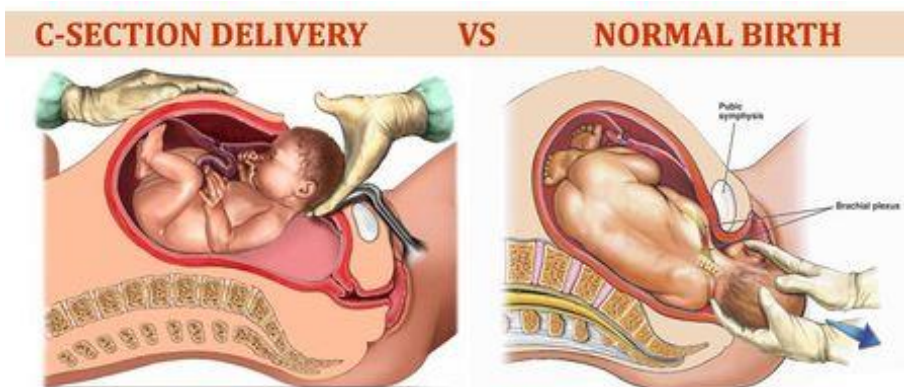
- Childbirth
 - Andropause, Baldness, Erectile Dysfunction
 - Ageing
 - Dying
 - ADHD
 - Biomedical Enhancement
 - Homosexuality
- 

Case study: Childbirth

“In the 20th century, most births take part in hospitals with the assistance of medical technology. A few centuries ago birth took part in the home with the help of midwives. Up until the 1600s, birth was in the female exclusive arena and men were only involved when there was a difficult birthing situation. In the 1700s, doctors became involved in deliveries. Having a lack of education in the subject, destructive instruments were used to deliver babies which often resulted in the death of the baby and/or the mother. It was not until 1723 that forceps were introduced and this invention was the hallmark of the obstetric era. Forceps are a surgical instrument shaped like a pair of tongs that were used to assist the delivery of a baby. Over the years and most evidently in the 20th century in the US, doctors became highly relied on for childbirth instead of midwives. Births began taking place in hospitals because of medical technology advancements and midwife use diminished” ([UBC Wiki](#), 2016).

“In the United States, caesarean deliveries are considered the most frequent major surgery. In 2009, the US rate of caesarean delivery was 32.9%.” ([UBC Wiki](#), 2016)

(image from UBC Wiki)



Article Write By: www.Stylehuntworld.Blogspot.com


Case study: Ageing

“The medicalization of old age manifests in various ways. First of all, old age itself and ageing process are defined as medical condition which should be treated (Estes and Binney, 1987; Weitz, 2010, Kaufman et al., 2004). Medicalization of old age manifests in attempts to control and to treat natural processes which take place in aging body: hormonal imbalances, flabby skin, boldness, graying hair, erectile dysfunction, etc. (Conrad, 2007; Marshall, 2007; Watkins, 2008). Physicians, pharmacists and ageing people themselves actively try to find cure or be cured from ageing “disease”; a wide spectrum of preparations, supplements, cosmetics and drugs are offered in purpose to do so....

...Adele Clarke and her colleagues (2003) suggested term biomedicalization which supposes to encompass and explain these shifts. Biomedicalization is defined as “increasingly complex, multisited, multidirectional processes of medicalization, both extended and reconstituted through the new social forms of highly technoscientific biomedicine” (Clarke et al., 2003, p. 161). The main role in biomedicalization process is performed by technoscientific innovations, such as biotechnologies, genetic engineering, the newest medical innovations and interventions, molecular biology, etc. Biomedicalization of old age refers to radical and even drastic health care sector specialists’ intervention into ageing process with the purpose to control and manipulate of ageing process: stop, slow or even eliminate it from human life time” (Jankūnaitė, 2014: 154) .

Case study: Dying


“In 1900 most Americans died at home, often surrounded by multiple generations of family members. By 1950 approximately half of all deaths occurred in hospitals, nursing homes, or other institutions. By the mid-1990s, 80 percent of Americans died in medical institutions, attended by paid staff. Persons over age sixty-five comprised less than 13 percent of the population, yet they represented 73 percent of all deaths in the United States in the mid-1990s. At the beginning of the twenty-first century, 55 to 60 percent of persons over the age of sixty-five die in the acute-care hospital, though patterns vary considerably across the nation (Institute of Medicine). Those persons fall into two distinct groups. The first includes elderly who were functioning independently until they were struck by a serious illness such as heart attack, stroke, or fractured hip. Most of those patients receive relatively intensive care. The second group includes people who are older, frail and debilitated, have multiple degenerative and chronic conditions, but are not clearly dying. The second group is larger, comprising 70 percent to 80 percent of elderly patients in the hospital. Individuals in that group may require repeated hospitalizations for supportive or intensive care, to stabilize conditions and treat acute problems” (Schluz et al., 2006, p.280).



“The first gay president of the World Psychiatric Association wants a radical rethink of mental illness and for the profession to apologise for the harm it has inflicted on gay people and women” (The Guardian, 27/11/2013).

In the same interview...

“He wants all medical, psychiatric and nursing students to be trained first in sociology and anthropology so they understand the culture in which they will practice”.



Medicalization can gain support from:

- Doctors
- Consumer groups
 - Especially for “contested illnesses”
- Medical insurance companies (support or not support)
- Pharmaceutical companies – HUGE interest involved



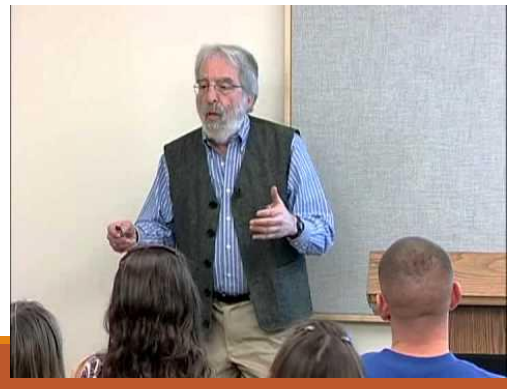
Consequences of Medicalization

Promotes social awareness of a problem

Unintended negative consequences

- ◆ Increases power of doctors
- ◆ Decreases power of other social authorities
- ◆ Medical treatment deemed only logical solution
- ◆ Depoliticalization
- ◆ Used to justify voluntary and involuntary treatment

The Pathologization of Everything - Turning all differences into Pathology (Conrad, 2013)



“The Last Well Person”

“ ‘The Last Well Person’ begins with this anecdote: “A supervising doctor asks a medical resident “What is a well person?” The resident replies with some confidence: “A well person is a patient who has not been completely worked up.”

Meador then proceeds to tell a tale that takes place in the not-too-distant future. The story’s only character is a 53-year-old professor of freshman algebra at a small college in the Midwest. Despite extensive medical evaluation, no doctor had been able to find anything wrong with the teacher. But he is the only remaining person for whom this is true. Doctors from all over the country flock to the Midwest to check him out.

At the time, Meador warned: “if the behavior of doctors and the public continues unabated, eventually every well person will be labeled sick.” (Meador, 1994, cited in [Mahar, 2012](#))

Health, Technology and Society

corporatization, commodification or commercialization of healthcare

Cases: Taking too many drugs

- “Nicole Lamber of Williamsburg, Va., says she became “completely nonfunctional”—with pain, rashes, diarrhea, and anxiety—from the adverse effects of several drugs, including some her doctors prescribed to treat side effects from her initial prescriptions....

Taking drugs that aren't needed

- “Jeff Goehring of Waukesha, Wis., suffered a debilitating stroke shortly after he began taking testosterone, which his doctor prescribed for fatigue even though the Food and Drug Administration hadn't approved it for that use, according to a lawsuit he's involved in....”

Taking drugs prematurely

- “Diane McKenzie from Alsip, Ill., had regular bouts of diarrhea and vomiting, side effects she attributed to the drug metformin, which her doctor prescribed for “prediabetes,” or borderline high blood sugar. But McKenzie found that losing weight controlled her blood sugar levels without drugs...”
- (Carr, 2017)

Expensive drugs

Turing Pharmaceuticals is a pharmaceutical company incorporated in Zug, Switzerland, with offices in New York City. The company started to do business in the US as Vyera Pharmaceuticals in September 2017. [Its products include]: daraprim (pyrimethamine), for the treatment of toxoplasmosis. The company was widely criticized for raising the price of daraprim by 5456% following its acquisition of rights to the drug in 2015.



Pharmaceutical Industry, or “Big Pharma”

- A for-profit enterprise, goal not only to develop drugs but to sell those drugs.
- plays a major role in determining how doctors and the public think about illnesses and treatments and in the rising costs of health care.
- the most profitable industry in the United States since the early 1980s.
- The dominance of big pharma: power (Andrew Edgar, 2013)

Pharmaceutical Huge Profits

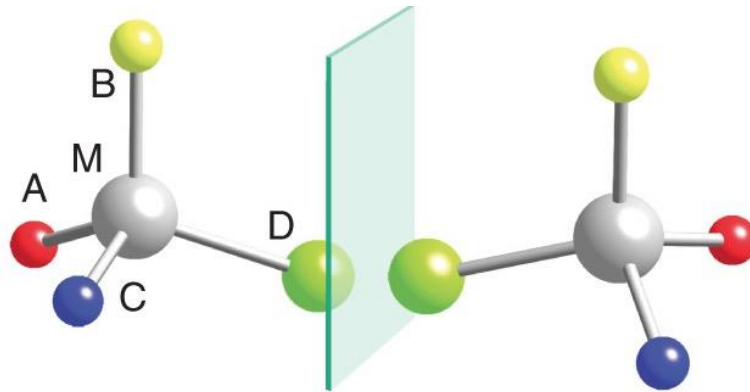
- Due to the value of R & D, or due to:
- Oligopolistic Rents (Spitz & Wickham, 2012)?
- Pharmaceuticalization (Conrad, 2005; Williams et al., 2011)?



- Profits only began soaring in the early 1980s, following a series of legal changes reflecting:
- both the increasingly “business-friendly” atmosphere in the federal government
- and the increased influence of the pharmaceutical industry lobby—now the largest lobby in Washington (Angell, 2004; cited in Weitz, 2017).

- New laws allowed researchers whose work was funded by federal agencies (including university professors, researchers working for small biotech companies) to patent their discoveries and license those patents to pharmaceutical companies.
 - gave these researchers a vested interest in supporting the pharmaceutical industry
 - made it possible for the industry to dramatically decrease its own costs for research.
 - (Weitz, 2017)
-
- new laws almost doubled the life of drug patents.
 - A drug is under patent means that the company owning that patent has the sole right to sell that drug.
 - The company can set the price for that drug as high as the market will bear, with no concern about competition.
 - current regulations make it easy for companies to extend their patents by developing “me-too” drugs, which differ only slightly from existing drugs in their dosage or formula.
 - E.g. [Esomeprazole \(Nexium\) \(\\$6\) replacing Omeprazole \(Prilosec\) \(\\$1\)](#)

“The strategy behind Nexium is called patent extension—a strategy to increase the amount of time during which the company that made the initial discovery has a “monopoly” on a particular drug, in this case, one that is essentially [chemically] identical.” (Bloom, 2017; images from acsh.org and hollislawfirm.com)

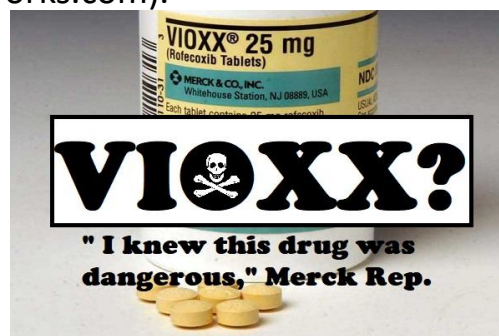


- Direct to consumers advertising, on television as well as in print media - highly effective.
-
- In one experimental study, pseudo-patients were sent to doctors' offices to request specific prescriptions, and more than half received them (Kravitz et al., 2005; cited in Weitz, 2017).

- Medicare (unlike private insurance programs) cannot restrict which drugs will be purchased and cannot negotiate with pharmaceutical companies to purchase drugs at bulk rates.

Developing New Drugs

- because pharmaceutical companies earn their profits by selling drugs, they have a vested interest in overstating benefits and understating dangers. And increasingly, these companies are both willing and able to manipulate the data available to outside researchers, doctors, federal regulators, and consumers (Abramson, 2004; Angell, 2004; image from althealthworks.com).



- the painkiller Vioxx, at \$4 per pill, was found to be no more effective than ibuprofen at 50 cents per pill. Vioxx quickly became one of the most popular drugs worldwide before it was withdrawn from the market because of its fatal side effects.

- In the past, university-based drug researchers provided at least a partial check on the drug research process.
 - Between 1980 and 2000, pharmaceutical industry funding for research by university-based scientists increased almost nine times (Lemmens, 2004).
 - That funding comes in many forms, from research grants, to stock options, to all-expenses-paid conferences in Hawaii.
 - federal funding for universities declined over the past quarter-century, university administrators came to expect their faculty to seek pharmaceutical funding.
 - (Weitz, 2017).
-
- When the pharmaceutical industry funds university-based research, it often retains the rights to the findings of that research, and can keep university researchers from publishing any studies suggesting that a particular drug is ineffective or dangerous (Angell, 2004; Lemmens, 2004; cited in Weitz, 2017.).

- even more dramatically increased funding to commercial research organizations (Lemmens, 2004). These organizations are paid not only to conduct research but also to promote it. (cited in Weitz, 2017).

- make drugs look as effective and safe as possible by
- selecting research subjects who are least likely to suffer side effects,
- Studying drugs' effects only briefly before side effects can appear,
- underestimating the severity of side effects that do appear,
- choosing not to publish any studies suggesting that a drug is ineffective or dangerous.
- (Weitz, 2017).

- Researchers have found that articles published in medical journals and written by individuals who received pharmaceutical industry funding are four to five times more likely to recommend the tested drug than are articles written by those without such funding (Abramson, 2004: 97; cited in Weitz, 2017.).

- growing practice of paying such researchers to sign their names to articles actually written by industry employees (Elliott, 2004).
- For example, between 1988 and 2000, ninety-six articles were published in medical journals on the popular antidepressant Zoloft.
- Over half of these were written by pharmaceutical industry employees but published under the names of university-based researchers.
- (Weitz, 2017).

The Truth About the Drug Companies

Marcia Angell, M.D.



- An Example-The AZT Story (image from Wiki)
- “A good illustration of the R&D process for an innovative drug is the story of AZT (also called zidovudine 齊多夫定), the first drug on the market to treat HIV/AIDS. Sold under the brand name Retrovir, it was originally manufactured by the drug company Burroughs Wellcome, which was later swallowed up by the much larger British firm GlaxoSmithKline. Despite the fact that the profits went at first to Burroughs Wellcome and now to GlaxoSmithKline, the research and most of the development was done in government and university laboratories. This is a story worth recounting in some detail.
- “Acquired immunodeficiency syndrome, or AIDS, burst on the scene in 1981, with the publication of three papers in The New England Journal of Medicine about a handful of gay men in Los Angeles and New York City who had died of overwhelming infections. Their immune systems were virtually obliterated, but no one could say why. The mysterious outbreak spread quickly and gave rise to intense worldwide efforts to find its cause. Speculation ranged widely, from contaminants in illegal drugs to a strange toxin picked up in Haiti to an unknown fungus. Within two short years, however, researchers at the NIH and the Pasteur Institute in Paris had pinpointed the culprit—a type of virus called a retrovirus.

- “A long time before that, in 1964, the AZT molecule had been synthesized at the Michigan Cancer Foundation as a possible treatment for cancer, and it was studied in many laboratories for that purpose. It did not prove effective against cancer, but in 1974, workers in a German laboratory found it to be effective against viral infections in mice. Burroughs Wellcome later acquired the molecule for possible use against the herpes virus.

- “Soon after the discovery of the cause of AIDS in 1983, Samuel Broder, head of the National Cancer Institute (NCI)-a part of the NIH-set up a team to screen antiviral agents from around the world as possible treatments for AIDS. Among the many he tested was Burroughs Wellcome's AZT. In 1985, his team, along with colleagues at Duke University, found that AZT was effective against the AIDS virus in test tubes and then in early clinical trials. Burroughs Wellcome immediately patented the drug to treat AIDS and carried out later trials that enabled it to receive Food and Drug Administration (FDA) approval in 1987, after a review of only a few months.

- “This was an extraordinary achievement. It took a mere six years from the first reports of a new disease for the cause to be found and an effective drug brought to market. But except for the speed, the story is not so different from countless other stories of how innovative drugs are discovered. It required bringing together many threads from many government, university, and other nonprofit sources, and only late in the process-in this case, very late-handing the drug off to a private company for further development, manufacture, and distribution.

- “As is also typical, the company claimed far more credit than it deserved, probably the better to justify its exorbitant prices originally about \$10,000 per year. After a self-congratulatory letter to The New York Times by the company's CEO, Broder and four colleagues from the NCI and Duke University responded angrily, reciting the seminal contributions Burroughs Wellcome did not make:

- “The company specifically did not develop or provide the first application of the technology for determining whether a drug like AZT can suppress live AIDS virus in human cells, 26 The Creation of a New Drug nor did it develop the technology to determine at what concentration such an effect might be achieved in humans. Moreover, it was not first to administer AZT to a human being with AIDS, nor did it perform the first clinical pharmacology studies in patients. It also did not perform the immunological and virological studies necessary to infer that the drug might work, and was therefore worth pursuing in further studies. All of these were accomplished by the staff of the National Cancer Institute working with the staff of Duke University.

- “And they added, "Indeed one of the key obstacles to the development of AZT was that Burroughs Wellcome did not work with live AIDS virus nor wish to receive samples from AIDS patients.”

- (ANGELL, 2004:24-27)

Regulating Drugs



- Regulating Drugs
 - In the United States, Food and Drug Administration (FDA) ensures the safety of pharmaceutical drugs
 - during the same time the FDA's power and funding declined, as part of a broader public and political movement away from "big government."
 - The pharmaceutical industry now routinely provides funding of various sorts to staff members at government advisory agencies, doctors who serve on FDA advisory panels, and legislators who support reducing the FDA's powers (Lemmens, 2004; cited in Weitz, 2017; image from fortune.com).
-
- the FDA makes its decisions based primarily on data reported to it by the pharmaceutical industry.
 - Yet the industry is required to report only a small fraction of the research it conducts.
 - drug companies must demonstrate only that new drugs work better than placebos, not older, less expensive drugs
 - (Weitz, 2017)

Marketing Drugs

- doctors legally can prescribe it for any purpose to any population.
- For example, human growth hormone to middle-aged men to stimulate muscle growth, even though the FDA has approved its use only for children with genetic pituitary defects that produce short stature
- (Weitz, 2017).

- Drug marketing has two major audiences, doctors and the public.
Marketing
- (Weitz, 2017).

- Since 1997, when pharmaceutical companies won the right to advertise brand-name prescription drugs on television, such advertising has skyrocketed.
- the purpose of these advertisements is to encourage consumers to press their doctors for prescriptions
- Companies increasingly encourage consumers to obtain prescriptions and drugs on the Internet, guaranteeing that they will do so without a doctor's advice.
- (Weitz, 2017).

Marketing Diseases

- As part of its marketing, the pharmaceutical industry “sells” not only treatments for diseases, but the diseases themselves. In some cases, drug companies have encouraged doctors and the public to define disease risks (such as high blood pressure) as diseases (such as hypertensive disease).
- (Weitz, 2017)

The Shifting Engines of Medicalization

- Doctors are still gatekeepers for medical treatment, but their role has become subordinate in the expansion or contraction of medicalization. Medicalization is now more driven by commercial and market interests than by professional claims-makers. The definitional center of medicalization remains constant, but the availability of new pharmaceutical and potential genetic treatments are increasingly drivers for new medical categories” (Conrad, 2005, p.3).

Pharmaceuticalization

- “The translation or transformation of human conditions, capabilities and capacities into opportunities for pharmaceutical intervention”. (Williams, Martin & Gabe, 2011, p.711).

Six dimensions in the pharmaceuticalisation of society (Williams, et al., 2011)

- Selling sickness? The redefinition and reconstruction of health problems as having a pharmaceutical solution

- “Disease mongering”
- Example:
 - erectile dysfunction
 - Restless leg syndrome
 - Female sexual dysfunction

- Five forms of inventing diseases (Jörg Blech, 2003) :

Normal life processes are sold as medical problems

Example: [Hair loss](#)

Personal and social problems are sold as medical problems

Example: Mental Illness

Risks are sold as diseases

Examples:

Pre-Osteoporosis

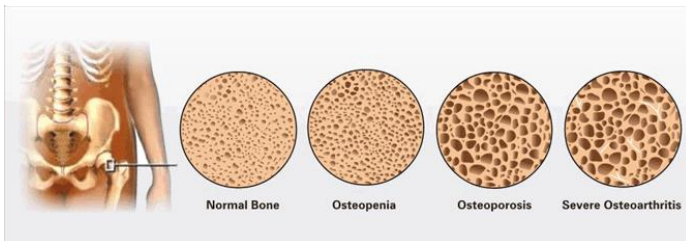
(image from strongandstable.com.au)

WHO classification of osteoporosis

	Bone mineral density*	T score	Prevalence (%)†
Normal	<1 SD	>-1	20
Osteopenia (or low bone mass)	1-2.5 SD	-1 to -2.5	52
Osteoporosis	≥2.5 SD	≤-2.5	28

*Below the young adult mean.

†In white women older than 50 years.⁵



Rare symptoms are sold as rampant epidemics

Erectile dysfunction

[Prescribing info](#) [Patient prescribing info](#) [Indication](#) [Important safety information](#) [Healthcare professionals](#) [*Terms and conditions](#)

[ORIGINAL BRAND, STILL THE ONE TO TALK ABOUT](#)
Learning
Taking
Getting
FAQs
Save 50%*

[What is ED?](#) • [How does VIAGRA work?](#) • [Is it right for me?](#) • [What are possible side effects?](#)



What is erectile dysfunction?

Erectile dysfunction is when a man has difficulty getting an erection. Or keeping it long enough for sex. It's also known as ED or impotence. It happens when not enough blood flows to the penis, preventing an erection.

It affects about 30 million men in the U.S. Some guys with ED find it difficult to either get or keep an erection every time they try to have sex. For others, ED symptoms can happen just once in a while. Either way, you should know that you're not alone.

ABOUT

50%

of men over 40 have some degree of ED*.

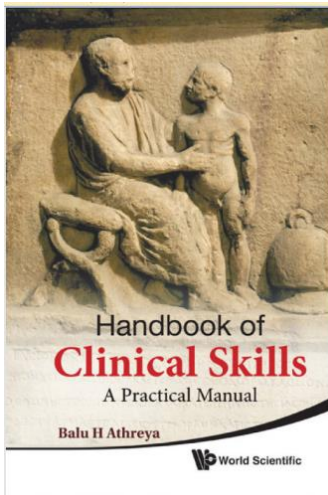
ED is not all in your head. It's not just a part of aging that you have to accept. It's a real medical condition, so it should be addressed like one. If you think you have ED symptoms, [talk to a doctor](#).

*Data taken from the Massachusetts Male Aging Study. Of 1,290 respondents, 52% stated that they had some degree of ED.

Slight symptoms are sold as harbingers of grave disorders

Irritable bowel syndrome

(images: Athreya, 2010:32; webmd.com)



advertise directly to the public. Indeed, "disease mongering" is a term being used to refer to this situation.⁸ Drug companies support disease awareness campaigns directly or indirectly. This then becomes a part of their marketing strategy. Moynihan and his colleagues investigated the role of a pharmaceutical company in promoting a product through another company specializing in corporate-backed "medical education". According to a leaked document, the education program's key aim was that, "Irritable bowel syndrome (IBS) must be established in the minds of doctors as a significant and discrete disease state." It is obvious how such a continuing medical education program aimed at the physicians combined with a media blitz can lead to establishment of any ailment as a dreaded disease in the minds of the lay public.⁸

Pressures from various directions have resulted in the naming of several new "diseases" in recent years without adequate scientific evidence. My intention is not to belittle the seriousness of these illnesses. Patients with these conditions suffer and they need our care and support. However, naming diseases without scientific evidence is not likely to be helpful to individual patients or to the society over the long term.

If a physician names a disease when none exists, he becomes part of the problem. The dangers are abandonment of scientific approach and procedures and treatment of a non-existent disease with unnecessary and dangerous drugs. The more serious problem is a closed

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TABLETS



- Changing forms of governance: globalisation and the new role of regulatory agencies
- Greater harmonization in the interpretation and application of regulatory guidelines for drug development and approval:
- Opening-up of new markets for global pharma companies to sell their products in emerging economies
- The outsourcing of conducting clinical trials to developing countries

WTO AND THE TRIPS AGREEMENT

- “The World Trade Organization (WTO) is the international organization dealing with the rules of trade between nations. As of February 2005, 148 countries are Members of the WTO. In becoming Members of the WTO, countries undertake to adhere to the 18 specific agreements annexed to the Agreement establishing the WTO. They cannot choose to be party to some agreements but not others (with the exception of a few "plurilateral" agreements that are not obligatory)” (WHO, 2019).

WTO AND THE TRIPS AGREEMENT

TRIPS

Trade **Related Intellectual Property** ^R

- “Of these agreements, Trade-Related Aspects of Intellectual Property Rights (TRIPS) is expected to have the greatest impact on the pharmaceutical sector and access to medicines. The TRIPS Agreement has been in force since 1995 and is to date the most comprehensive multilateral agreement on intellectual property. The TRIPS Agreement introduced global minimum standards for protecting and enforcing nearly all forms of intellectual property rights (IPR), including those for patents. International conventions prior to TRIPS did not specify minimum standards for patents. At the time that negotiations began, over 40 countries in the world did not grant patent protection for pharmaceutical products. The TRIPS Agreement now requires all WTO members, with few exceptions, to adapt their laws to the minimum standards of IPR protection. In addition, the TRIPS Agreement also introduced detailed obligations for the enforcement of intellectual property rights” (WHO, 2019; image from blog.ipleaders.in).
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The New York Times

Low-Cost Drugs in Poor Nations Get a Lift in Indian Court



The Times's Katie Thomas explains why a ruling in India favoring generic drugs has rippling effects around the world.

By Gardiner Harris and Katie Thomas

April 1, 2013



NEW DELHI — People in developing countries worldwide will continue to have access to low-cost copycat versions of drugs for diseases like H.I.V. and cancer, at least for a while.

- “...the decision allows Indian makers of generic drugs to continue making copycat versions of the drug Gleevec [格列衛], which is made by Novartis [諾華].... The drug provides such effective treatment for some forms of leukemia that the Food and Drug Administration approved the medicine in the United States in 2001 in record time. The ruling will also help India maintain its role as the world’s most important provider of inexpensive medicines, which is critical in the global fight against deadly diseases. Gleevec, for example, can cost as much as \$70,000 a year, while Indian generic versions cost about \$2,500 a year.” (The New York Times, April 1, 2013)

- Mediation: the (re)framing of health problems in the media and popular culture as having a pharmaceutical solution
- Patients, consumers and the life world: the creation of new social identities and the mobilisation of patient or consumer groups around drugs

Angell (2009) advice to citizens

- Take as few drug as possible – the danger of polypharmacy
- Avoid new drug- seldom tested in old people
- Remember importance of life-style choices
- Ignore drug advertising – push mute buttons!
- Beware of internet information
- Get independent, credible research organizations' opinions

Blech's (2003) twelve questions to diagnose invented diseases and dubious treatments (p. 139) (image from alchetron.com)



- 1 Is there a name for my illness?
- 2 Are there international guidelines describing diagnosis and treatment of this illness and if so, where can I read about them?
- 3 Is there a test that can clearly identify my illness?
- 4 In how many healthy persons does this test show a positive (pathological) result?
- 5 For people who tested positive, can repetition of the test result in a normal outcome? If so, for what percentage of people?
- 6 What is the proportion of false negative results? (How many people are not diagnosed by the test, but do actually have the disease?)
- 7 What are the potential consequences of this disease for me in one, two, ten years' time and in what percentage of people like me do these consequences actually occur after one, two, ten years?
- 8 In what percentage of people who *do not have* this disease can these complications occur anyway in one, two, ten years?
- 9 Is there an effective treatment for this disease?
- 10 In what percentage of people who are like me, and who *undergo* this treatment, do these complications *still occur* in one, two, ten years?
- 11 In what percentage of people who are like me, and who *do not undergo* the treatment, do these complications occur in one, two, ten years?
- 12 In what percentage of people who are like me, and who *undergo* the treatment, do complications *related to treatment* occur, which would not have occurred otherwise?

Source: Prof. Dr Peter Sawicki from DLeM Institute for Evidence-based Medicine in Cologne.

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