

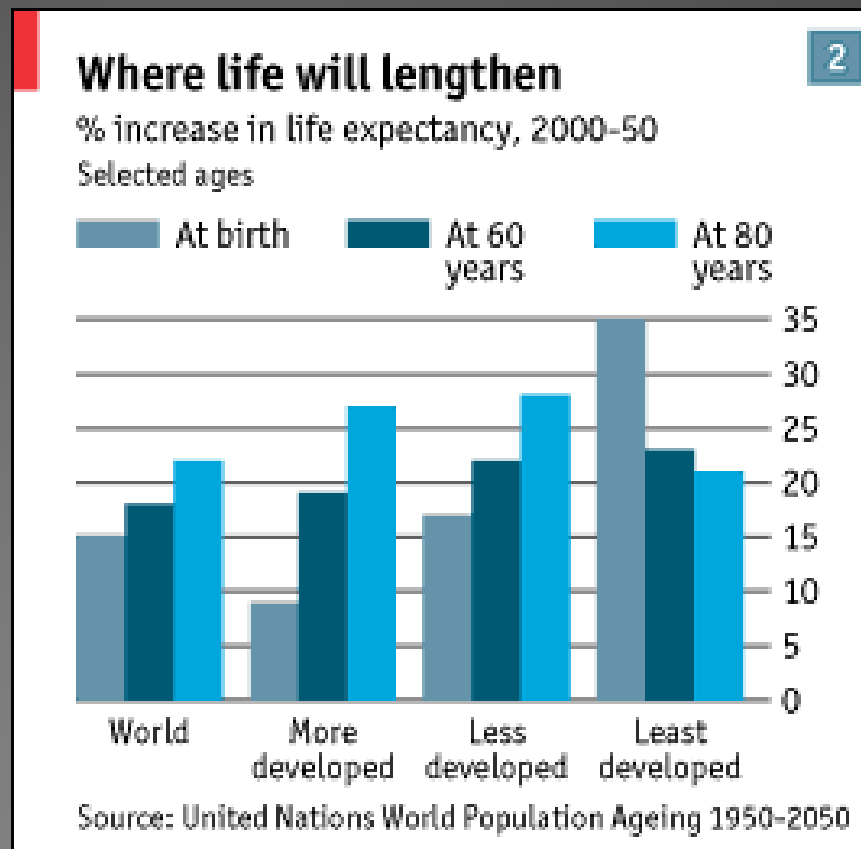
The JSM Debate 2004



**PDE5-inhibitors
are excellent life style drugs!**

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What medicine has offered to mankind?



What else medicine is fighting for?

Compression of morbidity:

finding ways to ensure that the rising number of people who achieve the apparent maximum lifespan do so in tolerable health, not just after extra years of decrepitude.

The ethics of longevity

Is it right to give
very old people extra years of life,
even if those years are healthy?

The fate of Tithonus, lover of Aurora, the dawn:
he asked for immortal life, and got it!
But he'd forgotten to ask for youth as well ...

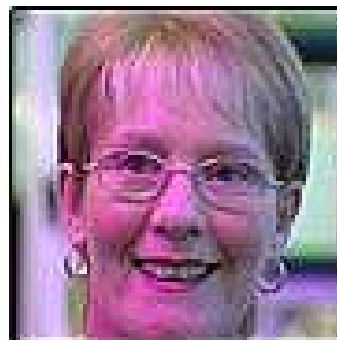


**The unbound desire
of human beings....**

Plastic surgery is fighting ageing!

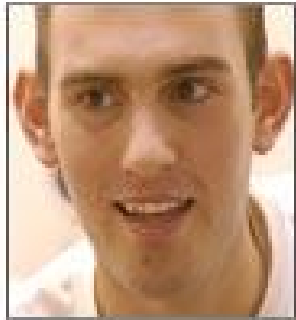


Before



After

The face you are born with and the one you may create!



Before



After



Before



After

The endless "Before and After" stories....



Before



After



Before



After



Before



After



Before



After

The new world



B
O
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X

Why does anybody undertake what a plastic surgeon calls “an operation you don’t need”?

- ◆ The desire to be beautiful is as old as civilisation, as is the pain that it can cause.
- ◆ In his autobiography, Charles Darwin noted a “universal passion for adornment”, often involving “wonderfully great” suffering.
- ◆ Europeans have been fixing their noses since at least the 1890s, Indians since a century before.

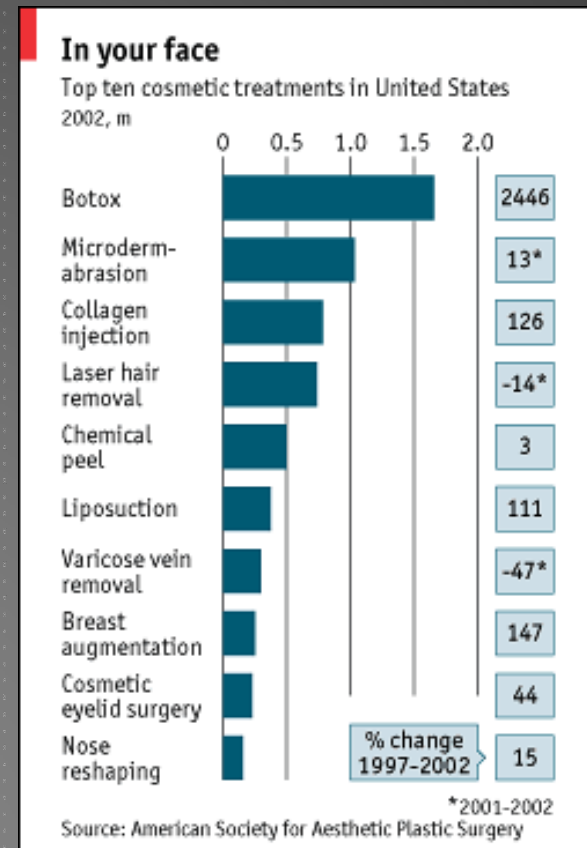
The American Society of Plastic Surgeons reports...

- The number of cosmetic surgical procedures grew from 413,000 in 1992 to over 1m in 1998.
- Men account for roughly 10% of all cosmetic procedures.

An industry driven by sexual instinct will always thrive

❑ The pain has not stopped the passion from creating a \$160 billion-a-year global industry.

✓ Americans spend more each year on beauty than they do on education.



Such spending is mere vanity?



- Attractive people (both men and women) are judged to be more intelligent and better in bed; they earn more, and they are more likely to marry.
- "Good look is women's most fungible asset, exchangeable for social position, money, even love" (Nancy Etcoff: "Survival of the Prettiest")
- Plastic surgery serves to make a woman look as though she was in her 20s: **THE PERFECT MATE !**

The Darwinian view of beauty

“everywhere have virtually the same sense of facial beauty”

The mating preferences of more than 10,000 people across 37 cultures showed that a woman's physical attractiveness came top of every man's list.

D. Buss, PhD
evolutionary psychologist



Lifestyle drugs: **definition**

- ❑ Lifestyle drugs are the one that meet **the following criteria:**
 - they are attractive to the popular media;
 - they enhance quality of life;
 - often address problems of a social or cosmetic nature;
 - are not conducive to reimbursement;
 - treat conditions attend on ageing.

Evolution of lifestyle drugs

- **Redefinition of an individual or social problem as disease** inevitably leads to quest for an appropriate treatment.
- Absolute prevalence in most lifestyle conditions is being **driven by the ageing of the population** in the developed world
- The **collective values of many constituencies in a society** define the healthcare priorities and **status of life style drugs in that hierarchy.**

Life style drugs: Present status

- Life style drugs have attracted a large population.
- What gives vast appeal to life style drugs is their ability to enhance the lives of people with **less severe symptoms or no real need**.
For instance, in case of PDE5-I, a big part of market is normally potent men who are looking for enhanced sexual performance.
- Such enormous spending could double the size of the drug industry over the next five years, sending ripple effects through the entire economy.

Frequency of sexual intercourse: a cultural issue

Range:

- France: 137 / y = 2.7 / w
- Japan: 46 / y = 0.9 / w

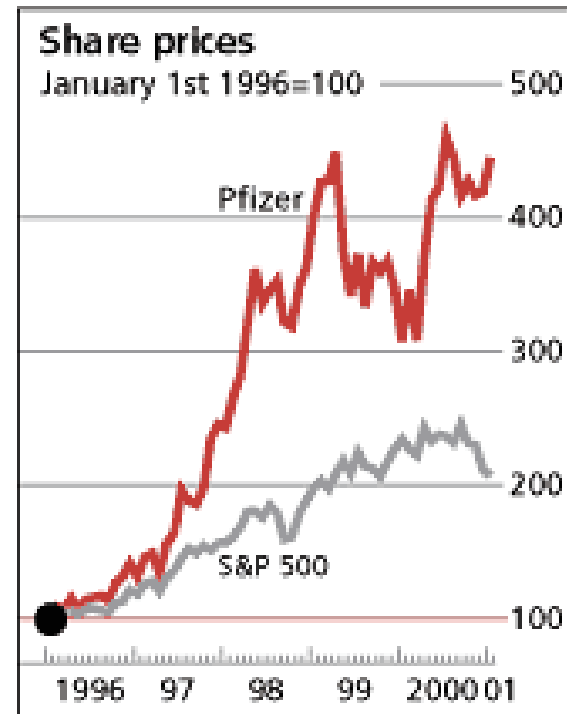
Global: 103 / y = 2 / w

Data: Durex sponsored "Global Sex Survey", 2003



The welcome of Viagra

Pfizzing



World's bestselling drugs

October 2000

	Product	Company
1	Losec	AstraZeneca
2	Lipitor	Pfizer
3	Zocor	Merck
4	Norvasc	Pfizer
5	Ogastro	Abbott Labs
6	Prozac	Eli Lilly
7	Celebrex	Searle/Pfizer
8	Seroxat	GlaxoSmithKline
9	Claritine	Schering Plough
10	Zyprexa	Eli Lilly

Sources: Thomson Financial Datastream; IMS Health

The challenge to invent a name with enough popular appeal to overcome the stigma of ED



Viagra: suggesting vigour and strength, it also rhymes with Niagara, evoking images of free and forceful flow.



Cialis: soft sounds to reflect this potential for spontaneity and intimacy.



Levitra: it plays upon the words "le" and "vita".

Men: the new sex object !

- Male genitalia was practically invisible into the 1960s.
- In 1972, *Cosmopolitan* offered up Burt Reynolds naked.
- Since the 1980s, the penis has gone decidedly public.
- Men have joined women as sex objects, and in so doing, they have assumed some of women's physical insecurities.
- Men's cosmetics are a boom market; that plastic surgery for men, including phalloplasty is big business.

Men and women vulnerabilities still differ:
women are more preoccupied with pleasure,
men with performance.

The role of the media



Darling, those sheikhs are wonderful !

- THE hottest product in Saudi Arabia's **booming black market is Viagra**, America's "wonderdrug" for impotent men.
- They change hands under the counter for as much as \$80 a pill, ten times their retail price in America.
- The trouble, say Saudi pharmacists, is that **not all the tablets now on the black market may be what they claim**.

May 21st 1998
From The Economist print edition

People were using "sex pills" creating endangered species

- Powdered rhinoceros horn is a favoured treatment for impotence (fewer than 12,000 rhinos remain in the world).
- Between 1998 and 2000, the harp-seal catch fell from about a quarter of a million to less than 100,000.
- Before 1998, a seal penis was worth \$70-100; afterwards, only \$15-20.

Conservation and Viagra : The kindest cut of all
Nov 14th 2002. From The Economist print edition

Marketing of PDE5-I:

treatment vs a picture of the life you'd like to have

health-information-based marketing

- Emphasis tended to be on male performance
- Celebrities as spokesmen project masculinity and success

VS

life-style marketing

- Never see the guy by himself; it's always about the relationship
- Try to set an atmosphere, creating an image

Internet: You can buy whatever you want anyhow!

WAREHOUSEMEDS

All drugs are FDA Approved

Medications prescribed right now and
discreetly shipped to your door in only 7 to 10 days

Save up to 80% off

of regular over the counter prices on
100's of drugs - **NO OTHER ONLINE
PHARMACY** can beat our prices
delivery and service!



CIALIS



XANAX



VALIUM



VIAGRA



No Doctors Appointments

No Medical History

No Prescriptions Required

**YOUR FASTEST, CHEAPEST
AND MOST RELIABLE PHARMACY
ON THE NET!**

WEIGHT LOSS | MUSCLE RELAXANTS | ANTI DEPRESSANTS | SLEEPING AIDS | PAIN RELIEF | MENS HEALTH | CODEINE | SEXUAL HEALTH | QUIT SMOKING | ALLERGIES | SKIN CARE | ANTI ANXIETY | ANTIBIOTICS |

The new generation is ready for sex and life style drugs!

Official: sex is good for you!



- The baby-boomers are reaching the age where assorted body parts are feeling the effects of time and gravity.
- The typical patient is from “married middle-class”.

PDE5-Is as life style drugs: monthly cost

low dose, every day use

“Typical” frequency of sexual intercourse:

- 1/w= 50 pills per year= 500 Euros
- 2/w=100 pills per year= 1000 Euros
- 3/w=144 pills per year= 1500 Euros

Every day low dose cost:

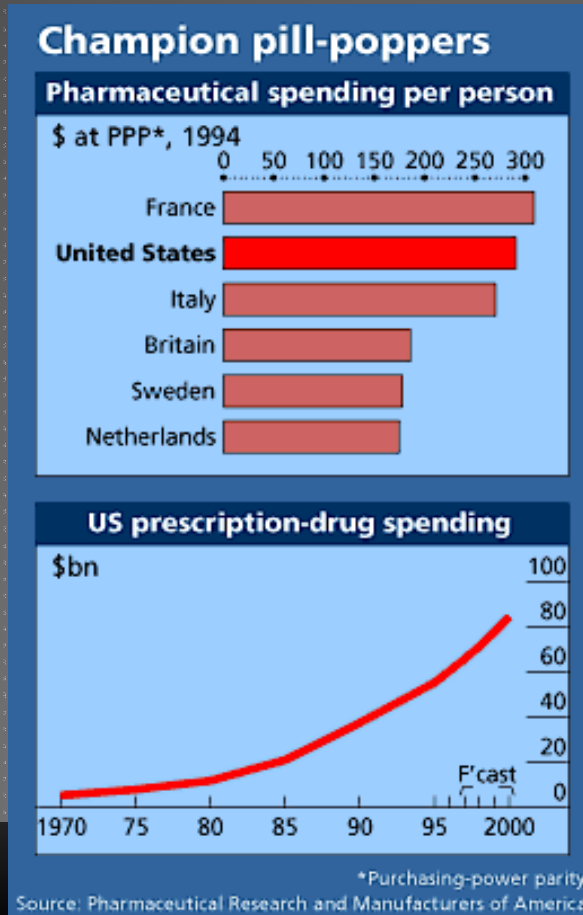
- 500:365 = 1.4 Euros per pill
- 1000:365 = 2.7 Euros per pill
- 1500:365 = 4 Euros per pill

Future PDE5-I monthly cost for everyday use:

Pack of 30 pills for: $2.7 \times 30 = 81$ Euros/month

Annual cost: 972 Euros/year

Give them their pills, the fuddled masses!



The average American might seem to be a pill-popping hypochondriac!

Apr 30th 1998 . From The Economist print edition

Solving a major problem....

- ✚ Mix the wrong legal drugs, or take the wrong dosage, and the result can be disastrous.
- ✚ In the USA, an estimate of 140,000 people a year die from the side-effects of prescribed drugs.

Is this a good reason for physicians to prescribe PDE5-Is in potent men, rather than having them making their orders directly through the internet?

Decision-making : Who?

- In 1992 the Dutch government suggested excluding contraception and adult dentistry from state funding; it was dropped after protests from women's groups.

The public's views in the decision-making process is undoubt, but:

- The State of Oregon tried using opinion surveys to help set the priorities of its health service, it reached the bizarre conclusion that **cosmetic breast-enlargement** was more important than treating **broken legs**.

What is our Society?

➔ a society which pushes people to procedures and products that are better kept for curing disease and correcting frank disorders than the frivolous pursuit of eternal youth.

➔ A society that sees nothing immoral or unnatural in the individual use of modern technology to boost human happiness, be it smaller noses, bigger breasts or a longer life.

When 'healthy' people take drugs, who decides what level of side-effects is acceptable?

- if the intrinsic value of a product to the individual is sufficiently high, and the risk is voluntary, then most people will accept it willingly.

Life style medicine?

Medical discoveries quickly expand from their laboratory origins through therapeutic applications to lifestyle improvement, pushed along by:

- ambitious clinicians,
- eager drug companies,
- demanding patients and
- excitable journalists.

Health: WHO definition

- A state of complete physical, psychological and social well-being.

Final position

- The consumers of life-style drugs simply have unfulfilled needs or desires
- Fuelling medicalization is the democratization of medical information brought about by internet access and the media.
- It is characteristic of lifestyle drugs that they encourage self-diagnosis : sexual dysfunction is a self-diagnosed conditions
- Physicians can not act as social engineers or, at least, arbiters of the social norm.

Final position

- 'the puritan tone' and the double vision of regulatory decisions, as well as the hypocrisy of the governments becomes clear
- 'the "chemicalisation" of happiness, achievable as a controlled event in the body, is not necessarily a bad thing. Morality is a cultural construct, variable with time and place.
- Hard science do not tell us that there would be a heavy social price to pay for a complete liberalization of 'sexual enhancing drugs' (alcohol abuse costs the UK £3.3 billion per year)

The era of lifestyle drugs is well established. Enjoy it!

- Perhaps it is time to deconstruct the entire concept and admit that there really is no such thing as a lifestyle drug only a lifestyle 'use'.
- Drugs are just chemical substances that affect our bodies and our minds and that can be put to many different uses, some obviously therapeutic, some more recreational and some directed towards satisfying other human aspirations.