Imperial College London

Lecture 3 Norms, science and medicine: the power of the normal

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Introduction

- Learning objectives
- Why we teach this stuff
- A disclosure
- Biological normal
- Social normal: normal distribution, surveillance medicine
- Assumptions, questions, difficulties: the doctor-patient encounter

Intended Learning Outcomes

You should all be able to:

1. Describe how concepts of the normal and abnormal are created in social and biological terms;

 Recognise that several forms of social differentiation will influence the doctor-patient encounter.

Tomorrow's doctor (GMC) - 2009

- Be able to explain normal behaviour at societal level
- Discuss sociological concepts of health, illness and disease
- Discuss sociological aspects of behavioural change and treatment compliance

Disclosure

- I am a clinician a GUM/HIV consultant
- I do not know much about sociology... (but I find it very interesting)
- I know a bit of Epidemiology
- We will have to talk about HIV and data

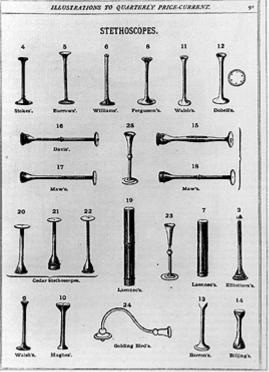
Measures and the concept of normal

Biological measurements

Session 2: What is normal?







C Maw and Sons, Book of Illustrations, 1869



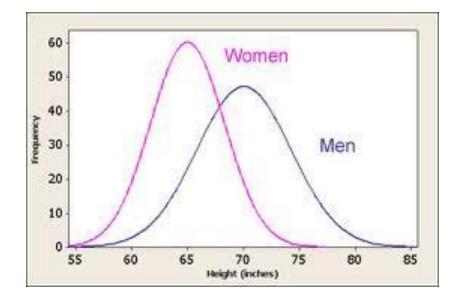


Session 2: What is normal?

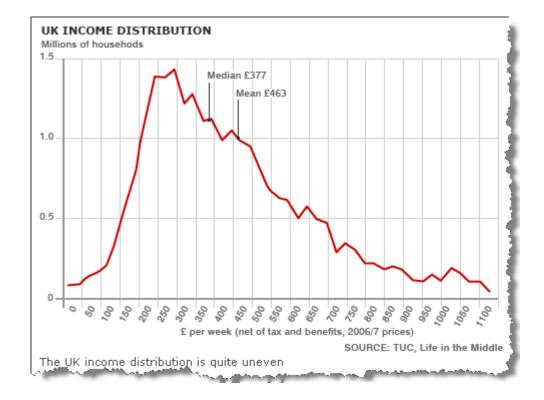
Biological normal

- People are different
- Compare individuals to the population
- Investigate the impact of the of the abnormal
- Predict health outcomes, intervene, modify, prevent...

The normal distribution



Not all frequency graphs are normal...



Social categories

- Gender
- Age
- Ethnicity
- BMI
- Class

Is this a normal result? What else would you like to know?

Weight-for-age percentiles: Weight-for-age percentiles: Boys, birth to 12 months 13 -Girls, birth to 12 months 13 -95th - 28 28 28 28 -90th 12 -12 26 26 26 26 95th 75th ginth 11 11 24 24 24 50th 75tl 10 -22 10 -22 22 22 25th 50th 10th 20 20 25th 20 20 9 -9 -5th 10th 5th 18 18 18 18 8 8 16 7 6 6 12 5 5 10 3 3 2-2 kg lb. kg lb lb lb Birth 6 9 12 Birth 3 6 9 12 3 Age (months) Age (months) Sources:

Average Growth Patterns of Breastfed Infants

The red points plotted on the CDC Growth Charts represent the average weight-for-age for a small set of infant boys and girls who were breastfed for at least 12 months (see references).

- Base chart -- CDC Growth Charts: United States, Published May 30, 2000.

Graphic by kellymom.com, 2004

 Breastfed baby data points -- WHO Working Group on Infant Growth. An Evaluation of Infant Growth: a summary of analyses performed in preparation for the WHO Expert Committee on Physical Status: the use and interpretation of anthropometry. (WHO/NUT/94.8), Geneva.
World Health Organization, 1994, p.21.

Other implications of biological normal

- Monitor certain individuals over time
- Timeframe for measuring and acting on it becomes the lifespan
- Impact on lifelong treatment, adherence, risk modification initiatives
- Impact on health promotion campaigns

Social normal

- What people are expected to observe
- Minority of social norms turn into law
- Where there is normal there is the deviant
- Normal Behaviours what is accepted by one group might be a deviant to another

Difference between biological and social norms

- Biological norms how to measure is essential
- Abnormal results can be risk factors, determine prognosis, indicate the presence of disease
- Social norms: good and bad
- Desire to monitor and modify becomes health promotion

The issue of 'normal behaviour'

- How to measure behaviour?
- Classification of normal X abnormal
- What to do when you find an abnormal behaviour?
- The label: some diagnosis can became attached to the label of abnormality

Surveillance Medicine

The case of HIV

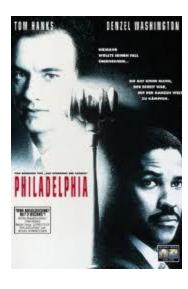
Surveillance Medicine

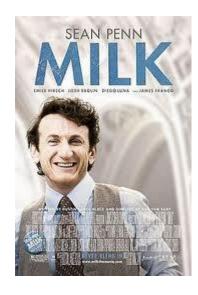
- Armstrong (1995) the concern is not restricted to the ill person, but the whole population
- Absence of disease is not the same as health
- Risk factors: diet, weight, behaviour, ...
- Need to identify those risk factors

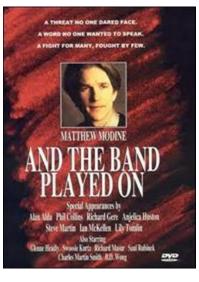
HIV and Surveillance

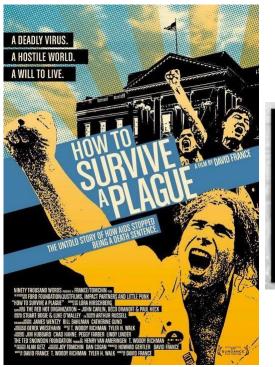
- First cases of Pneumocystis infection and Kaposi Sarcoma (1981) were reported
- Risk factors: men having sex with men, Blood recipients, intravenous drug users.
- What was common to these groups?
- Which behaviours were associated with having this new disease?

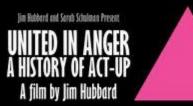






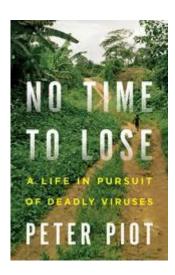






United in Anger: A History of ACT UP is an inspiring documentary about the birth and life of the ADB addivis movement from the pengaktive of the people in the treaches fighting the epidemic. Utilizing onal histories of memory and ACT UP, as well as mare activate blockage, the life depicts the efforts of ACT UP as it betters corporate greed, social indifference, and government neglect. AND POLITICS, PEOPLE, AND THE AIDS EPIDEMIC THE BAND "STUMMED...AN IMPRESSIVELY RESEARCHED AND REMAY DETAILED MARATIVE."-- TIME PLAYED OND

RANDY SHILTS



5 min discussion

- What were the early assumptions people had about those living with HIV?
- What drove those assumptions?
- What were the impact of those assumptions on patients, clinicians and the general population?

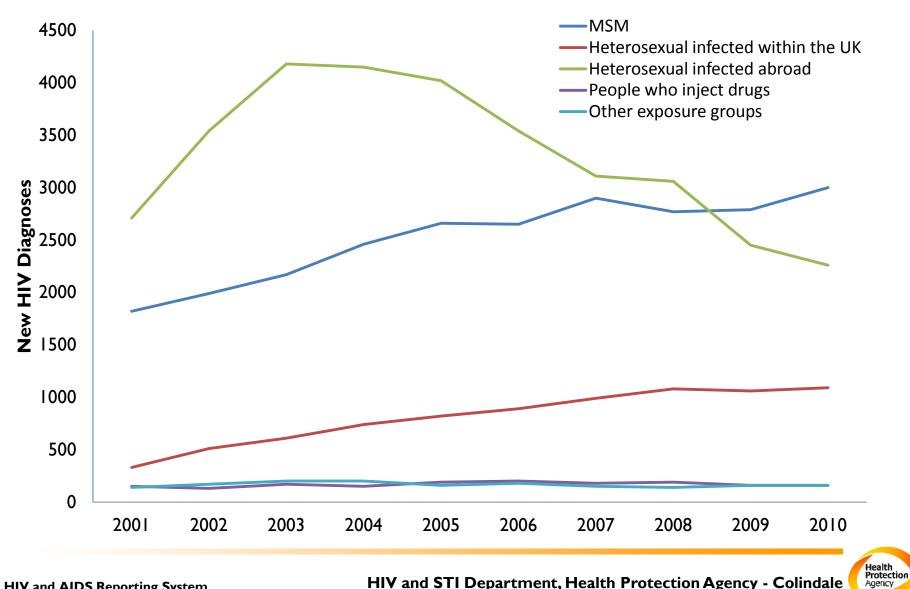
Assumptions

- From early data: Homosexuals, IVDU, and later on Africans...
- Death sentence
- Maybe it was associated with poverty, gender inequality, sex work, poor access to health care and prevention...
- Data mixed with fear, prejudice, lack of knowledge, moral judgment
- Main impact: Stigma

More assumptions

- Elisabeth Pisani's talk TED
- UK public campaign 1986
- Australian AIDS ad

New HIV diagnoses by exposure group: United Kingdom, 2001 – 2010



HIV and AIDS Reporting System

HIV and STI Department, Health Protection Agency - Colindale

Surveillance in HIV - New Infections

- Increased in Men who have sex with Men (MSM)
- Increased in Heterosexuals infected in the UK
- Stable in people who inject drugs
- Incidence also decreased in heterosexuals infected abroad

Doctor patient relationship

- What brings a patient to the health professional? (Sophie's talk)
- How does the patient experience the disease?
- The impact that being sick has on that person's life and social interactions
- Do patient and doctor agree on the diagnosis?

Doctor patient relationship

- What does the clinician bring to it?
- How does the doctor's previous experiences influence his/her decisions, diagnosis, etc?
- Does doctor and patient seek the same treatment as a solution to the problem?
- Are the doctor's and patient's expectations about outcome the same?

Any questions?

Thank you

Session 2: What is normal?