

Reforming the Welfare State: the Parliamentarian's View

Professor the Lord Kakkar



My talk today

- The fiscal challenge
- Evolution of the Welfare State
- Delivering comprehensive healthcare
- The challenges facing society

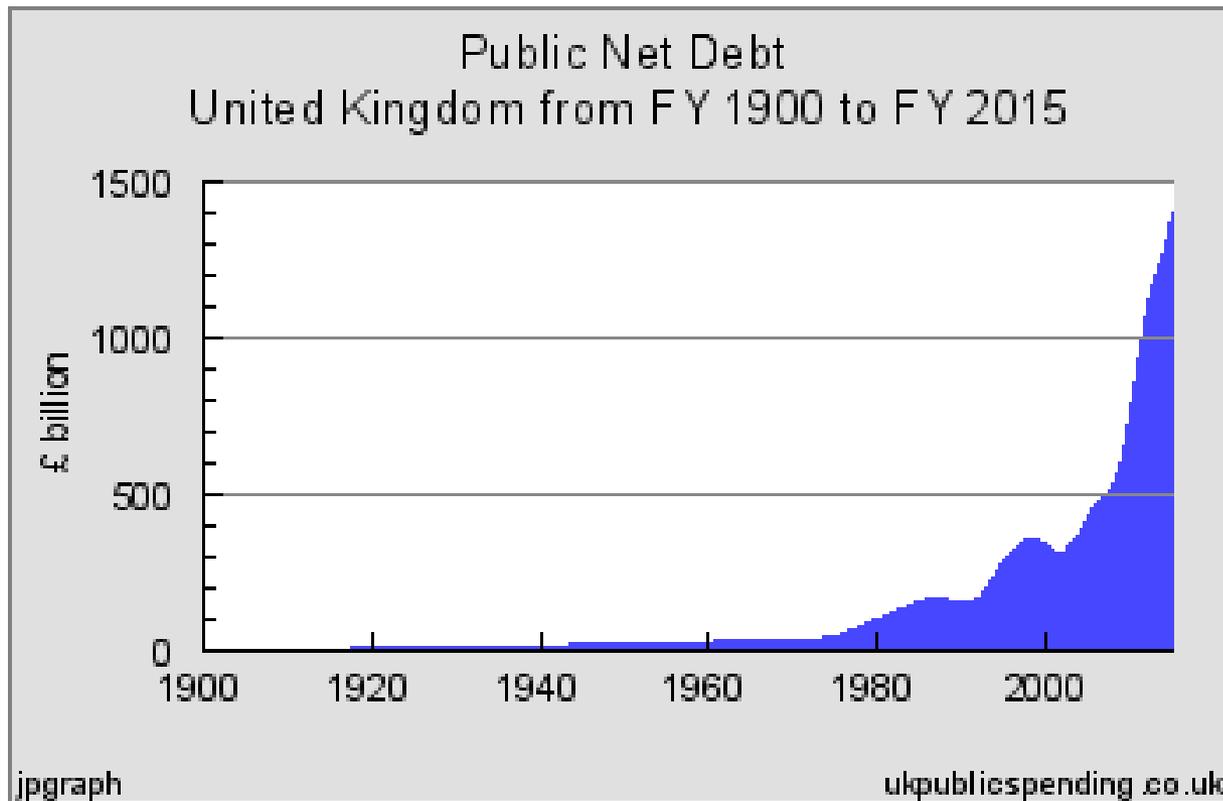
Background

- Cross bench Peer – independent member of the House of Lords
- Appointed in 2010
- Significant changes due to new government and devastating fiscal situation



2010: debt/GDP ratio

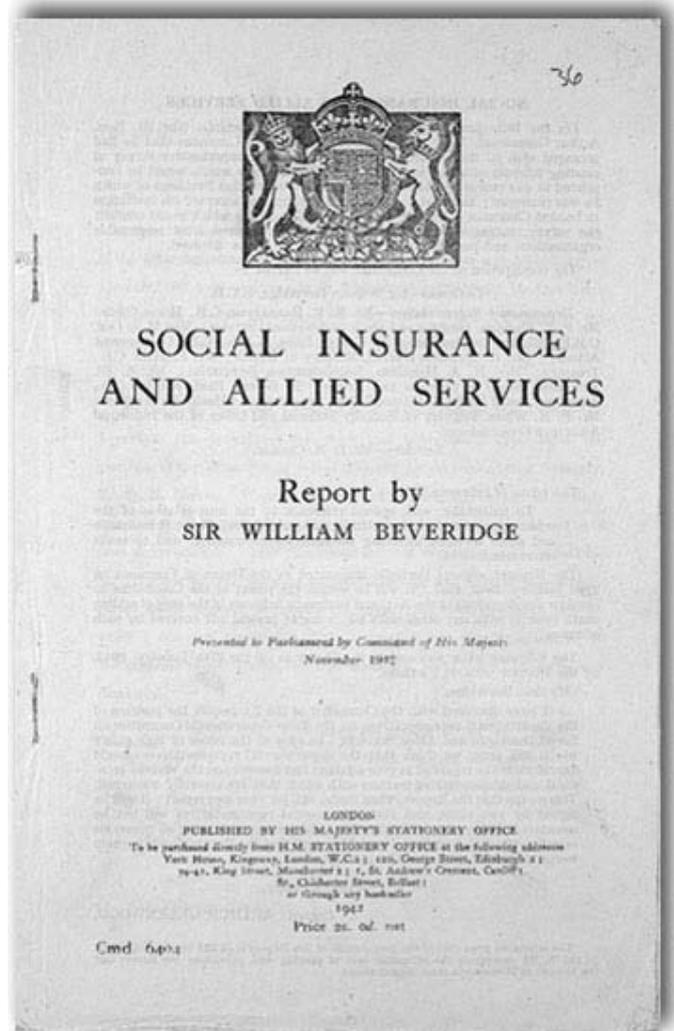




Public perceptions



Birth of the Welfare State



Beveridge Report of 1942

Recommended that the government should find ways of fighting the five 'Giant Evils' of 'Want, Disease, Ignorance, Squalor and Idleness'

Healthcare demand at the birth of NHS in 1948 and 60 years later

	1948	2008
Life expectancy for men	66	77.2
Life expectancy for women	71	81.5
Deaths per 100,000 live births	86	6.2
Infant mortality per 1,000 live births	34.5	5
Deaths caused by heart disease (percentage of total deaths)	35.4%	34.6%
Deaths caused by stroke (percentage of total deaths)	11.5%	9.6%
Total NHS budget	£280m	£89.5bn
Total drug budget	£31.7m	£11bn
Cost per head per lifetime	£200	£1,700

How did we manage heart disease in 1948

Armchair Treatment of Myocardial Infarction

Nuzhet O. Atuk, M.D.; Julian R. Beckwith, M.D.; J. Edwin Wood Jr., M.D. *AMA Arch Intern Med.* 1959;104(2):249-252.

Armchair Treatment of Myocardial Infarction

NUZHET O. ATUK, M.D.; JULIAN R. BECKWITH, M.D.; and J. EDWIN WOOD JR., M.D., Charlottesville, Va.

Recently there has been considerable interest in the armchair treatment of myocardial infarction. Clinical observations of Levine¹ indicated that patients generally did better when they were allowed to sit up in a chair at intervals during the day than they did at complete bed rest. Improvement was striking in some of the patients who were desperately ill with congestive heart failure. It was stressed that this regimen improved the psychological state of the patient and facilitated the rehabilitation process.² They could find no evidence that the armchair treatment produced any deleterious long-range effects.³

Clinical observations were made by Beckwith et al.⁴ in a series of 80 patients with acute myocardial infarction, one-half of whom were kept at complete bed rest and the other half allowed to sit up in a chair at intervals during the day. The mortality rate was no higher among the latter half than among the former.

Cox⁵ has shown by catheterization studies that cardiac work in both normal persons and patients with arteriosclerotic heart disease is less when they are sitting in a chair than when they are in the supine position.

The present study was devised to evaluate further (the concept of) the "Armchair

Treatment," by determining, through utilization of Star's cardiac work principle, the cardiac work of patients who were convalescing from acute myocardial infarction while sitting in a chair and lying in bed, respectively.

Methods and Materials

Seventy patients with acute myocardial infarction were studied, and cardiac work determinations were made at intervals after onset during their three-week hospital stay. Between the first and sixth days after the onset of the infarction, patients were allowed to sit up in a chair one-half hour twice daily for three days and then one hour twice daily for three days. This was increased gradually until they were allowed to sit up all day. No patient was urged to sit up beyond the point of fatigue. As a rule, the patients were first permitted to sit up on the side of the bed and to swing their legs, so far as they tolerated and adjusted to the sitting position. No patients who had shock or pain at the time of the study were allowed to sit up. Ambulation was not allowed at any time during the three weeks.

Blood pressure and pulse rate were determined at 3-minute intervals for 20 minutes in both lying and sitting positions. Average figures for systolic and diastolic pressures were used in determining the cardiac work in supine and sitting positions. Cardiac work (work of the left ventricle) was determined by use of Star's cardiac work formula,⁶ which employs stroke volume, resistance (mean blood pressure), and a constant.^{7,8}

After the left ventricular work per beat is obtained, the result is multiplied by the heart rate per minute, which is the cardiac work per minute. In 15 cases, cardiac work determinations were made.

Because of inability to estimate stroke volume by the Star formula in patients with arrhythmias,

Submitted for publication Dec. 8, 1958.

From the Cardiovascular Division of Internal Medicine, University of Virginia School of Medicine—Instructor in Medicine (Dr. Atuk); Associate Professor of Internal Medicine (Dr. Beckwith); and Professor of Internal Medicine (Dr. Wood).

*Cardiac work, in gram-meters = $1.27 \times 0.011 \times V_s$

V_s (stroke volume) in cc = $10 \div 0.1$ pulse pressure (systolic minus diastolic) (correction of disappearance of sounds, mm Hg) - 851 age in years

V_r (mean pressure) in mm Hg = $1.21 \div 0.5$ systolic pressure (systolic minus diastolic) (correction of disappearance of sounds, mm Hg)

- By 1948, sodium was widely recognized as the major determinant in extracellular fluid volume.
- Drug therapy was confined to pain relief and anti-coagulants, with mercurial diuretics for heart failure, and noradrenaline for shock. The in-hospital mortality was in the region of 25–30%.
- Debates arose over armchair vs. bed rest treatment for MI.

Advice for a cardiologist in 1956

“In 1956, when I was working at the National Heart Hospital in London, the Professor of Medicine in my old medical school advised me not to pursue a career in cardiology. He saw little future in it as ‘all the mitrals had been operated upon’.”

-D. Julian

Focus today is on prevention of:

- coronary disease
- hypertension
- diabetes
- cardiomyopathy

Julian D. The forgotten past: The practice of cardiology in the 1950s and now European Heart Journal (2000) 21, 1277–1280.

How do we manage heart disease today

- 82% of patients having a heart attack in England will undergo primary angioplasty (Primary angioplasty has led to a 22% reduction in mortality)
- Multiple pharmaceutical agents
 - *Aspirin*
 - *Anti-hypertensive agents*
 - *Other anti-platelet and anti-coagulants*
 - *Statins*
 - *Anti-arrhythmics*
- 23% of the cost of the £9bn spent on CVD was on drugs in 2009
- Open heart surgery slowly being replaced by less invasive approaches



Health and Social Care Act 2012

Health and Social Care Act 2012

- **April 1st 2013**
- **Significant changes to the structure of the NHS**
- **Key priorities for health and care**
 - *Reducing preventable early death*
 - *Improving standard of care that people receive*
 - *Improving the treatment and care of people with dementia, mental illness and other long-term conditions*
 - *Bringing the technology revolution to the health and care sectors*

What does this mean for us as clinicians

- **Rationing**
 - *Reducing the number of cycles available for IVF on the NHS*
 - *Limited access to chemotherapeutic agents*
 - *Requiring physiotherapist reviews prior to accessing orthopaedic services for back pain*
- **Changing the way we deliver care**
 - *Integrated care*
 - *Care at home*
 - *Telemedicine*
- **'Nicholson Challenge' in the NHS**
 - *deliver efficiency savings of £15-20 billion between 2011 and 2014*
 - *Efficiency gains of 4% per year*

National Institute of Clinical Excellence

NICE's role is to improve outcomes for people using the NHS and other public health and social care services.

This is done by:

- Producing evidence-based guidance and advice for health, public health and social care practitioners.
- Developing quality standards and performance metrics for those providing and commissioning health, public health and social care services;
- Providing a range of information services for commissioners, practitioners and managers across the spectrum of health and social care.

Biomedical Informatics

- Health informatics is the knowledge, skills and tools which enable information to be collected, managed, used and shared to support the delivery of healthcare and promote health.
- Bioinformatics is the use of computational, mathematical and statistical methods to organise, analyse and interpret biological information, particularly at the molecular, cellular, genetic and genomic levels.

Bioinformatics

- Bioinformatics is central to the interpretation and exploitation of the wealth of biological data being generated in the post-genome era with the consequential major clinical and commercial benefits.
- 100,000 genome project; the UK government pronounced that this project will sequence the personal DNA code of up to 100,000 patients over the next five years leading to better and earlier diagnosis and personalised care.
- Herceptin, in 2010, became the first genetically targeted therapy for breast cancer.

Health informatics

- **Health Informatics is the clinical application of information technology providing immediate access to accurate information at the point at which it is needed.**
 - *Facilitating joined-up care by enabling the secure sharing of clinical information across a variety of organisations and care settings.*
 - *Improving access to high quality and reliable clinical information, for patients and clinicians alike.*
 - *Improved medical technology helps clinicians to deliver safe and appropriate care, which directly improves service quality and patient health outcomes.*
- **Health informatics is one of the fastest growing areas within healthcare. In its most simplest term, health informatics is about getting the right information to the right person at the right time.**

What will this mean for patients and society

- Improved patient choice to allow for competition between hospitals and providers
- Greater personal responsibility for health including the use of personalized health budgets
- Difficult choices
 - *Closure of hospitals*
 - *Reduced access to medicines and treatments not deemed appropriate by NICE*
 - *Reconfiguration of services*
 - *Public health considerations vs. advanced technological intervention at the end of life*

Summary

- The end of the Welfare state :NO
- Need for serious reform : YES
- In healthcare this will require innovation, integrated care, greater focus on prevention
- Health and social care will become a seamless continuum
- Patients will become custodians of their own budgets
- Health informatics and bioinformatics will drive the personalized medicine revolution