The ethical implications of excessive Iona Heath prevention Quaternary prevention, addressing the limits of medical practice 20<sup>th</sup> WONCA World Conference Prague 2013

# The preventive imperative

The prevention of disease and premature death is the holy grail of public health and, since at least the time of Hippocrates in the 5th century AD, doctors have sought to prevent diseases as well as to offer treatments and cures. The history of medicine is marked by major successes in preventive medicine which include

the prevention of scurvy by the dietary provision of vitamin C beginning with James Lind's Treatise in 1753



# 1753

# SCURVY.

A

TREATISE

#### IN THREE PARTS.

CONTAINING An Inquiry into the Nature, Caufes, and Cure, of that Difeafe.

Together with A Critical and Chronological View of what has been published on the Subject.

By JAMES LIND, M.D. Phylician to his Majefly's Royal Holpital at Haftar near Portfmouth, and Fellow of the Royal College of Phylicians in Edinburgh.

The THIRD EDITION, enlarged and improved.

LONDON:

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# 1796





the development of vaccination against smallpox by Edward Jenner in 1796



The prevention of puerperal fever by handwashing by Ignaz Semmelweis











the capping of the Broad Street pump by John Snow in 1854 to end a cholera epidemic



# the discovery of the link between smoking and lung cancer by Richard Doll and his team in 1950.





vaccination against small pox

1952-8

Each of these and many similar examples have prevented hundreds of premature deaths and incalculable human misery.

Indeed - consideration of preventive advice remains an essential element of every medical encounter. In 1979, Stott and Davies listed four possible components of each consultation in primary care. The last of these was opportunistic health promotion, advice made more effective by being directly linked to the content of the preceding consultation. For example, advice to stop smoking is proportionately more powerful when it is linked to an episode of acute bronchitis or a first presentation of angina.

A	B
Management of presenting problem	Modification of help-seeking behaviour
C	D
Management of continuing problems	Opportunistic health promotion

Stott N C H, Davies R H. The exceptional potential of the consultation in primary care. *J R Coll Gen Pract* 1979;**29**:201-5.

# BUI

Throughout human history, unscrupulous people have sought to make money out of human illness. One contemporary manifestation of this is the global screening industry which sets out to identify an evergreater proportion of the population as being at risk of premature death or disabling illness, and then to sell a preventive intervention.



More than a decade ago, David Sackett, the epidemiologist and pioneer of evidence-based medicine, warned us that:

The two disciplines [of curative and preventive medicine] are absolutely and fundamentally different in their obligations and implied promises to the individuals whose lives they modify.

Sackett DL. The arrogance of preventive medicine. *CMAJ* 2002;**16**(4):363-4.

"Preventive medicine displays all 3 elements of arrogance.

First, it is aggressively assertive, pursuing symptomless individuals and telling them what they must do to remain healthy . . .

Second, preventive medicine is presumptuous, confident that the interventions it espouses will, on average, do more good than harm to those who accept and adhere to them.

Finally, preventive medicine is overbearing, attacking those who question the value of its recommendations."

When someone feels unwell and seeks relief of symptoms, the doctor has a clear responsibility to do his or her best but cannot guarantee success. In primary preventive care, the doctor seeks out the patient rather than vice versa and, with an implicit promise of benefit, offers someone who is at present in good health an intervention which is expected to make their life better in the future. Unfortunately, all such interventions oblige the recipient to consider a range of possible threats to their health and are almost always associated with a degree of heightened anxiety and fear. For some people, this fear can become overwhelming and debilitating in itself. In Denis Pereira Gray's memorable image, preventive interventions stain the clear water of health with the ink of fear and once stained the water can never be clear again. Fear cannot be taken back. The diagnosis of risk is not something to be undertaken lightly or unthinkingly.



Unfortunately, the almost universal fear of death and the desire for longer and healthier lives is reflected in huge enthusiasm for preventive medicine on the part of government, the media, the public and some doctors. This enthusiasm is assiduously cultivated by the pharmaceutical and health technology industries and is driving the identification of more and more risk factors and more and more possible interventions for each of these.

Cancer prevention strategies seem to be assuming more and more of the features of a moral crusade. In the 1950s, educational materials promoting breast self-examination implied that "that an advanced breast cancer is a self-inflicted disease." This is a much more recent example. A responsible and rational citizen is expected to actively seek out and eliminate all possible risks to their future health and to consume medical technologies in order to achieve this aim.

Screening always causes harm because overdiagnosis and false positives are inevitable.

If you haven't had a manning gram younsed more than your preases examined.

> A mammogram is a safe, low-dose X-ray that can detect breast cancer before there's a lump. In other words, it could save your life and your breast.

If you're a woman over 35, be sure to schedule a mammogram. Unless you're still not convinced of its importance.

In which case, you may need more than your breasts examined.

> Find the time. Have a mammogram.



Give yourself the chance of a lifetime.

For every 2000 women invited for screening throughout <u>10</u> years, <u>one</u> will have her life prolonged. In addition, <u>10</u> healthy women, who would not have been diagnosed if there had not been screening, will be diagnosed as breast cancer patients and will be treated unnecessarily. Furthermore, more than 200 women will experience important psychological distress for many months because of false positive findings.

> Gøtzsche PC, Nielsen M. Screening for breast cancer with mammography. Cochrane Database of Systematic Reviews 2011

### Then only last week

this article appeared in my morning paper

# Breast cancer screening not shown to reduce deaths, say researchers

Latest study of mortality figures in England over 39 years fails to show benefit of regular mammograms

Press Association The Guardian, Tuesday 11 June 2013



The latest results do not rule out a benefit of breast cancer screening for individuals, but the effects are not large enough to be seen at the level of the population. Photograph: Burger/Phanie/Rex Features

Breast cancer screening programmes have yet to show a reduction in the number of women who die from the disease, researchers say. A study suggests there is no evidence that screening women for breast cancer has an effect on mortality. This is the research behind the story and this is the conclusion -

### RESEARCH



Breast cancer mortality trends in England and the assessment of the effectiveness of mammography screening: population-based study

Toqir K Mukhtar • David RG Yeates • Michael J Goldacre

Unit of Health-Care Epidemiology, Department of Public Health, University of Oxford, Oxford OX3 7LF, UK Correspondence to: Toqir K Mukhtar. Email: toqir.mukhtar@dph.ox.ac.uk We sought evidence of a decline in population-based breast cancer mortality that could be attributed to the implementation of mammographic screening programmes. We conclude that population-based mortality statistics, at least in England, do not show a past benefit of breast cancer screening. While this does not rule out a benefit at the level of individual women, these effects are not large enough to be detected at the population-level.

> Mukhtar TK, Yeates DRG, Goldacre MJ. Breast cancer mortality trends in England and the assessment of the effectiveness of mammography screening: population-based study. *J R Soc Med* 2013; **106**: 234-242.

This warning ran between 1936 and 1938 – and it seems as if we perhaps need to beware the cancer quack again

# BEWARE THE CANCER QUACK

#### A REPUTABLE PHYSICIAN DOES NOT PROMISE A CURE DEMAND ADVANCE PAYMENT · ADVERTISE

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And of course, it's not just cancer screening – similar findings are emerging for most of the major risk factors. In August last year, The Cochrane Review on *Pharmacotherapy for mild hypertension* concluded that antihypertensive drugs used in the treatment of otherwise healthy adults with mild hypertension (BP between 140/90 and 159/99) have not been shown to reduce mortality or morbidity in randomised controlled trials.



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#### Pharmacotherapy for mild hypertension

Diana Diao<sup>1,\*</sup>, James M Wright<sup>2</sup>, David K Database Title Cundiff<sup>3</sup>, Francois Gueyffier<sup>4</sup>

Editorial Group: Cochrane Hypertension Group

Published Online: 15 AUG 2012

This rapidly becomes a story of greed – the greed of those living in the richer countries of the world for ever greater longevity and most particularly the greed that underpins the commercial imperatives of the pharmaceutical and medical technology industries

# <u>greed</u>

The 2012 World Health Organisation *Global Health Expenditure Atlas* reports that the OECD countries consume more than 80% of the world's healthcare resources but experience less than 10% of the world's disability adjusted life years. This must be unsustainable in terms of both global justice and the world's capacity. The problem is that where the OECD countries lead, the rest of the world tends to try and follow. Or is pushed to follow.



## WHO Global Health Expenditure Atlas



Ethical implications: • Individual harm;

- Threat to universal healthcare;
- Marginalisation of socioeconomic causes of illhealth.

# I can identify three serious ethical implications and I hope

that you will be able to suggest more.

- The first is the extent of harm to individuals caused by being labelled as being at risk and the unnecessary fear that this can engender, which itself can undermine health and well-being. This is the ink in the water.
- The second concerns the potential of excessive prevention to render healthcare systems based on social solidarity unviable because of the escalating costs involved.
- The third is the way in which biotechnical preventive activity marginalises and obscures the socioeconomic causes of ill-health.



#### **Preventing Overdiagnosis Conference**

Sept. 10-12, 2013, at the Dartmouth Institute for Health Policy & Clinical Practice, Hanover, N.H., USA, in partnership with BMJ, Consumer Reports and Bond University.

I wanted to remind every body about this important conference to be held in the US in September 2013 and I do begin to wonder whether Overdiagnosis is a more accessible label than quaternary prevention- it is clear that P4 has gained some currency across the Spanish-speaking world but it does not seem to be taking off elsewhere. I think Overdiagnosis is an easier concept to grasp and I hope we will be able to discuss this further.

Finally let me end with the wise words of James McCormick, formerly Professor of Community Health at Trinity College Dublin Health promotion ... falls far short of meeting the ethical imperatives for screening procedures, and moreover diminishes health and wastes resource. General practitioners would do better to encourage people to lead lives of modified hedonism, so that they may enjoy, in the full, the only life they are likely to have.

McCormick J. Health promotion: the ethical dimension. *Lancet* 1994; **344**: 390-1.