QALYs and Ethics

Prof. dr. Jan van Busschbach

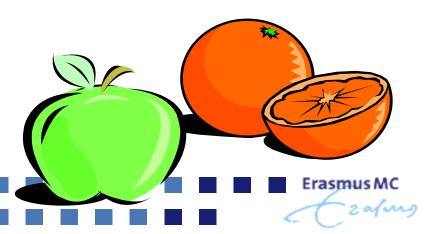
Health Economics

□ Comparing different allocations

- Should we spend our money on
 - Wheel chairs
 - Screening for cancer
- Comparing costs
- Comparing outcome

□ Outcomes must be comparable

Make a generic outcome measure



Outcomes in health economics

□ Specific outcomes are incompatible

- Allow only for comparisons within the specific field
 - Clinical successes: successful operation, total cure
 - Clinical failures: "events"

 "Hart failure" versus "second psychosis"

□ Generic outcome are compatible

- Allow for comparisons between fields
 - Life years
 - Quality of life

■ Most generic outcome

Quality adjusted life year (QALY)

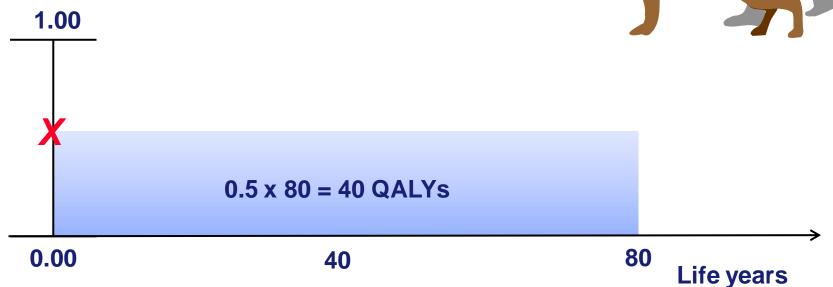


Quality Adjusted Life Years (QALY)

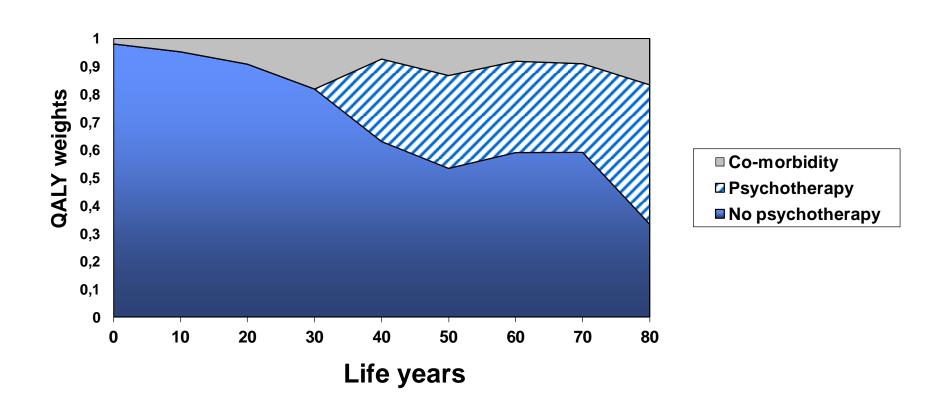
□ Example

- Blindness
- Time trade-off value is 0.5
- Life span = 80 years
- $-0.5 \times 80 = 40 \text{ QALYs}$





Area under the curve



zalung

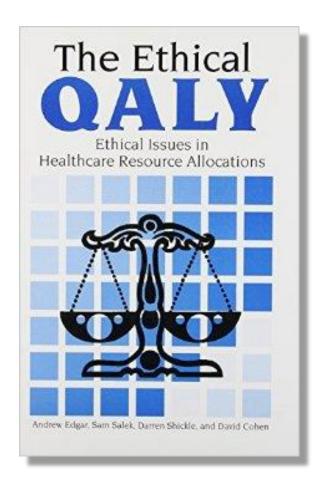
Cost per QALY

- □ 20 QALY gained
- □ €100.000
- □ Cost per QALY
 - €100.000/20 QALYs = €5.000/QALY

QALY league table

Intervention	\$/QALY
GM-CSF in elderly with leukemia	235,958
EPO in dialysis patients	139,623
Lung transplantation	100,957
End stage renal disease management	53,513
Heart transplantation	46,775
Didronel in osteoporosis	32,047
PTA with Stent	17,889
Breast cancer screening	5,147
Viagra	5,097
Treatment of congenital anorectal malformations	2,778

Ethical critics on QALY



In the past, much criticism

Cohen CB.

Quality of life and the analogy with the Nazis.

Journal of Medicine and Philosophy 8: 113-35, 1983.

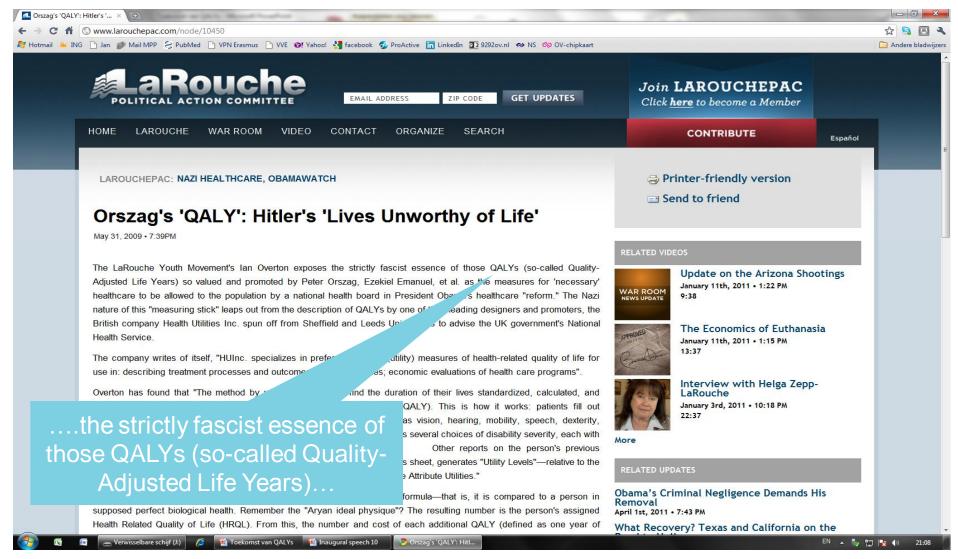
CYNTHIA B. COHEN

'QUALITY OF LIFE' AND THE ANALOGY WITH THE NAZIS

ABSTRACT. The introduction of 'quality of life' judgments into treatment decisions is viewed as pernicious by some who claim that these presuppose the Nazi position that those who are 'devoid of value' must be exterminated. 'Quality of life' judgments are said to deny the equal value of human beings and to assume that some lives are not 'worthy to be lived'. It is argued that the analogy misconstrues the senses of 'value' and 'quality' employed by Naziism and a 'quality of life' position. This leads the analogizers incorrectly to claim that both views assimilate the value of human beings to the value of their condition. A 'quality of life' position is grounded in recognition of the logical priority of the value of human beings as self-reflective evaluators and agents, which is a matter of kind, not degree. The 'quality of life' is explicated in terms of the standards of well-being of individuals, which are derived from their basic human needs and their individual priorities and goals. The use of 'quality of life' judgments is morally required to ensure that considerations of justice and individual autonomy govern treatment decisions. The purported analogy misconstrues the views of both the Nazi position and a 'quality of life' position and so is seriously misdirected.

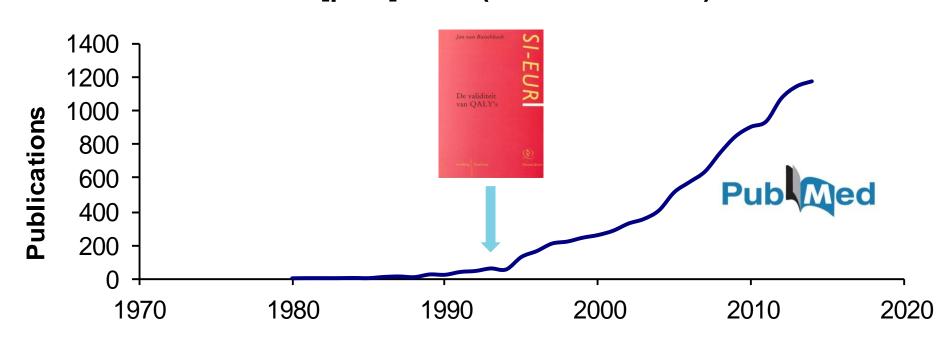
Human beings who are critically ill are being allowed to die or caused to remain alive with increasing frequency on the basis of poorly understood 'quality of life' judgments. These are viewed as pernicious by some who take them to deny the equal value of all human beings as such and to presuppose that some human lives are not 'worthy to be lived'. Proponents of 'quality of life' assessments claim that they are based on recognition of the value of human beings, and maintain that this very value entails that individuals ought not be subjected to a life that is below that of minimal human well-being. This disagreement about 'quality of life' considerations raises basic

Criticism remains



10.915 QALY publications

1980[pdat] AND (QALY or QALYs)



Three problems with the ethical criticism

- 1. Arguments represent aversion toward a limited budget
- 2. Proposed alternatives turn out to be the same
- 3. Even equity concerns are in need of QALY

1. Arguments often represent aversion limited budget

"...Wij hebben duidelijk aangegeven dat een discussie over "wat maatschappelijk nog aanvaardbaar is" [kosten per QALY] alleen gevoerd mag worden als geldverslindende "frivoliteiten" door de maatschappij [...] zijn uitgebannen. Bijvoorbeeld "joint strike fighters"...

Kees van Bezooijen in his roll as Patient representative, 2007



2. Proposed alternative turns out to be the same...

□ TWiST

Time Without Symptoms of disease and subjective Toxic effects of treatment

Health Years Equivalent

□ SAVE

Saved Young Life Equivalent

□ Capabilities

Amartya Sen

DALY

Disability Adjusted Life Years



Burden of Disease Project

- □ WHO Global Burden of Disease (GBD)
- □ Impact of diseases world wide
- □ Estimates of epidemiology per disease
 - Mortality
 - Quality of life losses
- □ In need of one measure of health
- □ But WHO disliked QALY...



Chris Murray

□ Harvard

School of Public Health

□ Worked outside

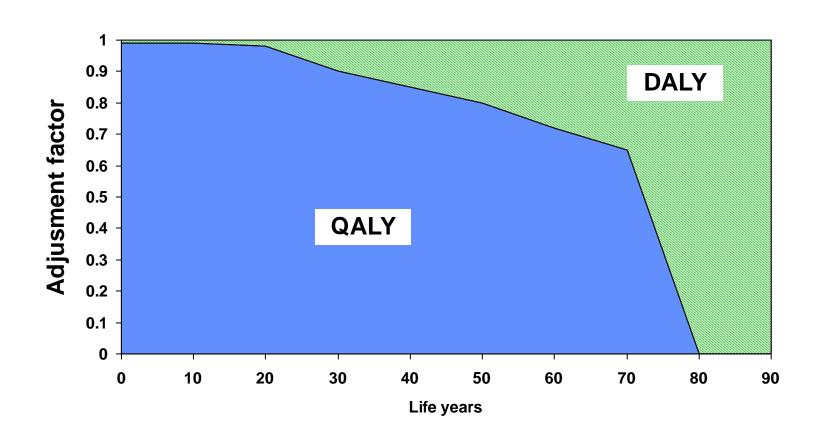
- Health economics
- Med Decision Making

DALY

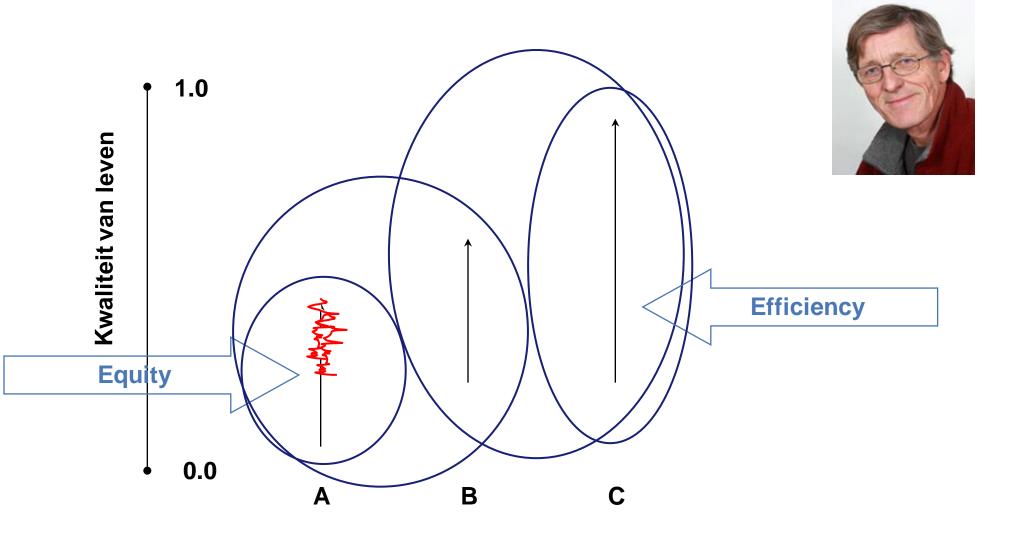
- Disability Adjusted Life Years
- Lost life years
- Lost Quality of life



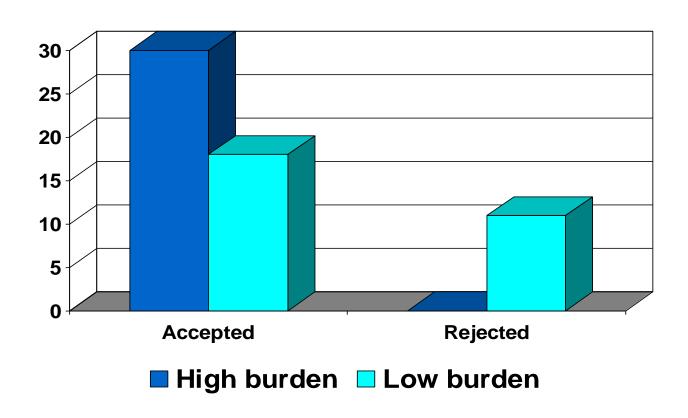
DALY / QALY



3. Equity

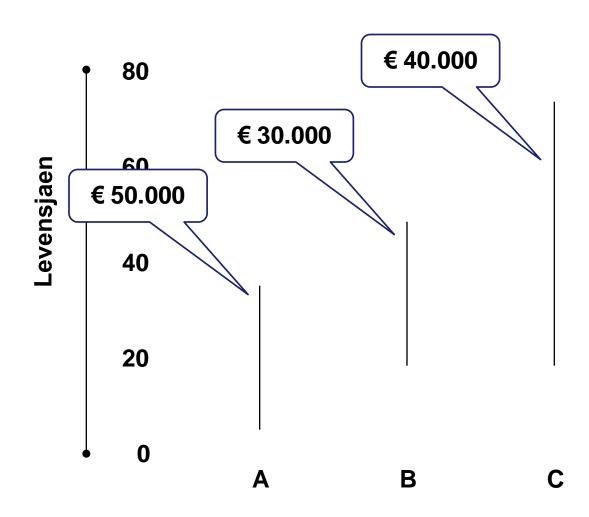


Is (should) burden (be) a criterion?

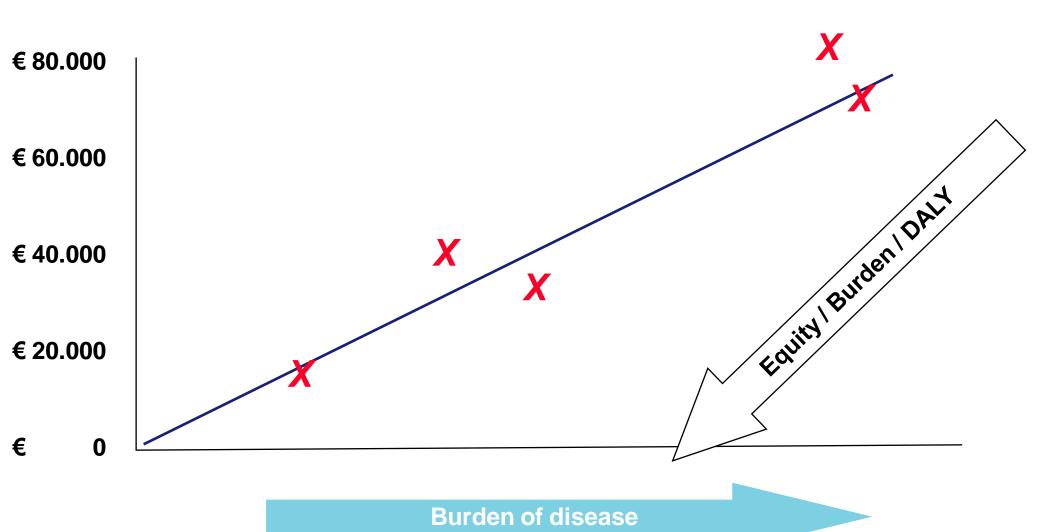


Pronk & Bonsel, Eur J Health Econom 2004, 5: 274-277

Costs/QALY as indicator of solidarity

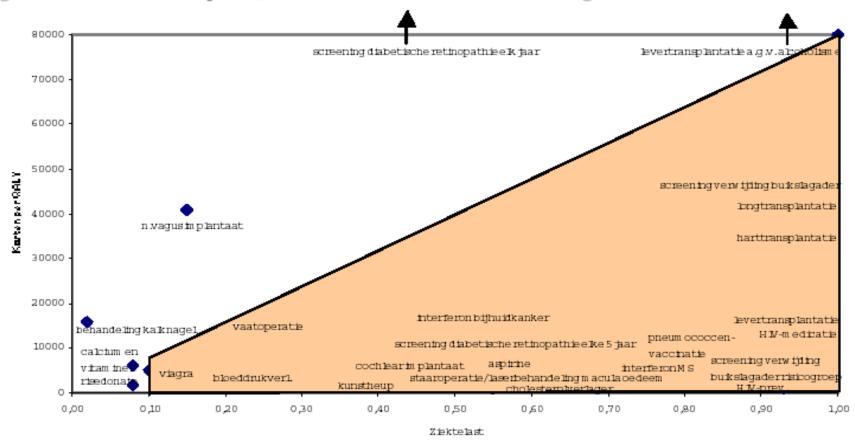


Costs/QALY versus Burden of disease



Dutch Council for Public Health and Health Care (De Raad voor de Volksgezondheid en Zorg, 2006)

Figuur 3.1 Kosten per QALY naar ernst van de aandoening



Three problems with the ethical criticism

- 1. Arguments represent aversion toward a limited budget
- 2. Proposed alternatives turn out to be the same
- 3. Even equity concerns are in need of QALY