

## Session 3 - Impact Measurements

{Hebrew Follows}

### Syllabus:

#### 1. Intro

- **Duration:** 10 minutes
- **Discussion:** Ask: If you had to compare the most effective interventions in the world, what parameters would you use?
- Introduce Qalys, Dalys, and Subjective Well-Being in one sentence each  
SWB- Subjective measurement of the well-being/happiness per individual  
Dalys- An overall number for the number of life years lost from a specific disease in a specific area  
Qalys- Subjective measurement of Quality and Length of life per individual

#### 2. Split to discussion groups

- **Duration:** 15 minutes
- **Resources:** [Tables](#)
- **Discussion:** Split to 3 groups. Every group is distributed to either Qalys, Dalys or SWB. At the end- every team has to explain their type of measurement, the table, and 2 pros and cons for their measurement

#### 3. Discuss the different types of measurement

- **Duration:** 15 minutes
- **Discussion:** Every group tells about their pros and cons and explains their table. The facilitator helps with gaps of understanding.

#### 4. Vote & Discussion

- **Duration:** 10 minutes
- **Discussion:** Which measurement would you use to compare different types of interventions? Ask- what other considerations are there? Talk about other kinds of measurements and considerations (like ripple effects, or reduction of emissions)
- If fits in discussion- raise the question about [StrongMinds](#)- when measured in HLI considerations tops GiveDirectly

## More resources:

[?What is a QALY](#)

[?What is a Quality Adjusted Life Year, or QALY](#)

[Health Economics](#)

[\(DALYs and QALYs \(V1 .3](#)

[Using Subjective Well-Being to Estimate the Moral Weights of Averting Deaths and Reducing Poverty - EA Forum](#)

## Tables:

### Qalys

By placing a tick in one box in each group below, please indicate which statements best describe your own health state TODAY.

#### 1. Mobility

- I have no problems in walking about ☐  
I have some problems in walking about ☐  
I am confined to bed ☐

#### 2. Self-care

- I have no problems with self-care ☐  
I have some problems with washing or dressing myself ☐  
I am unable to wash or dress myself ☐

#### 3. Usual activities

- I have no problems with performing my usual activities (e.g., work, study, housework, family, or leisure activities) ☐  
I have some problems with performing my usual activities ☐  
I am unable to perform my usual activities ☐

#### 4. Pain/discomfort

- I have no pain or discomfort ☐  
I have moderate pain or discomfort ☐  
I have extreme pain or discomfort ☐

#### 5. Anxiety/depression

- I am not anxious or depressed ☐  
I am moderately anxious or depressed ☐  
I am extremely anxious or depressed ☐

### Dalys

Sequela	Health state name	Health state lay description	Disability weight
Moderate malaria	Infectious disease, acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.	0.051 (0.032-0.074)
Severe anemia due to malaria parasitemia	Anemia, severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.	0.149 (0.101-0.209)
Moderate malaria with severe anemia	Infectious disease, acute episode, moderate, with severe anemia	(combined disability weight)	0.192 (0.133-0.263)
Asymptomatic malaria parasitemia	Asymptomatic	--	0 (0-0)
Severe major depressive disorder	Major depressive disorder, severe episode	has overwhelming, constant sadness and cannot function in daily life. The person sometimes loses touch with reality and wants to harm or kill himself (or herself).	0.658 (0.477-0.807)
Mild cocaine dependence	Cocaine dependence, mild	uses cocaine at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.116 (0.074-0.165)
Blindness due to diabetes mellitus type 1 retinopathy	Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.	0.187 (0.124-0.260)
Mild intellectual disability due to encephalocele	Intellectual disability / mental retardation, mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026-0.064)
Primary infertility due to congenital genital anomalies	Infertility, primary	wants to have a child and has a fertile partner, but the couple cannot conceive.	0.008 (0.003-0.015)
Severe low back pain without leg pain	Back pain, severe, without leg pain	has severe back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person sleeps poorly and feels worried.	0.272 (0.182-0.373)

## Subjective Well-Being

### Personal Well-being 2012/2013

Personal Well-being 2012/2013

How  
**Satisfied**  
are you with your  
life nowadays?

**77%** say 7 or more  
out of 10

↑ **1.2** percentage points  
on previous year



Personal Well-being 2012/2013

To what extent do you feel that  
the things in your life are

**Worthwhile?**

**81%** say 7 or more  
out of 10

↑ **0.7** percentage points  
on previous year



Personal Well-being 2012/2013

How  
**Happy**  
did you feel yesterday?

**72%** say 7 or more  
out of 10

↑ **0.5** percentage points  
on previous year



Personal Well-being 2012/2013

How  
**Anxious**  
did you feel yesterday?

**21%** say 6 or more  
out of 10

↓ **0.9** percentage points  
on previous year



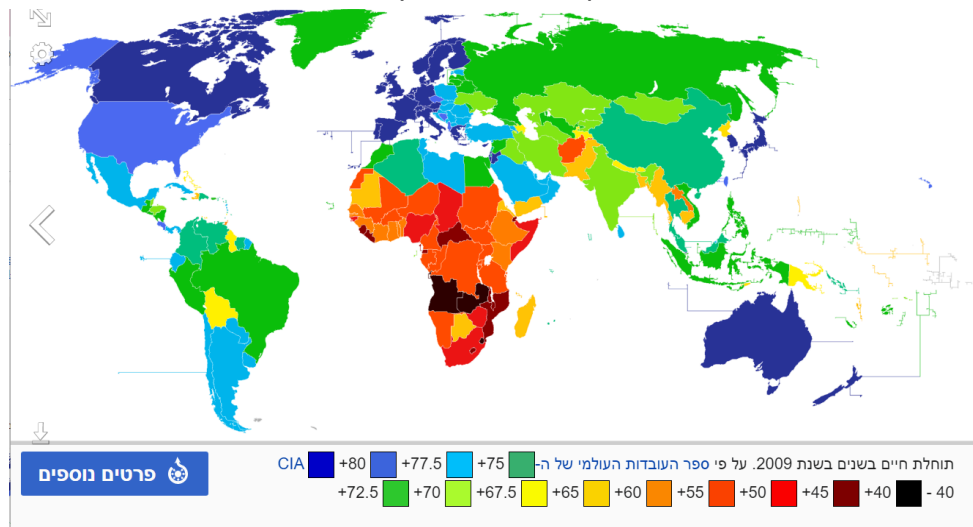
דף עזר:  
מונחים ראשיים:

מדד סובייקטיבי המשקלל את איכות החיים וכמות החיים של הפרט - **Qalys**  
מדד כללי המבטא את מספר השנים שאבדו בעקבות מחלה מסוימת באזור מסוים - **DALYs**  
מדד סובייקטיבי של הרווחה/אושר של הפרט - **Subjective well-being**

מונחים נוספים:

**מהי תוחלת החיים?** היא מדד סטטיסטי לתוחלת הזמן שנותר לפרטים חיים מקבוצה נתונה להישאר בחיים בגיל כלשהו.

\* מאחר שאין אפשרות לחשב את תוחלת החיים עצמה (כלומר, הזמן הצפוי שנותר לפרט לחיות) אלא רק האומדן של תוחלת החיים, נהוג לכנות לשם קיצור גם את אומדן תוחלת החיים בשם תוחלת חיים.



פירוט:

### QALYs

Quality-adjusted life year

**One QALY = one year in perfect health.**

- דוגמאות לבחירות ששואלים אנשים במצב של בריאות לקויה על מנת לסווג איכות חיים:
  - בחירה בין להישאר במצב של בריאות לקויה לתקופה מסוימת לבין חזרה לבריאות מושלמת עם תוחלת חיים קצרה יותר
  - בחירה בין הישארות במצב של בריאות לקויה לתקופה מסוימת לבין התערבות רפואית שיש לה סיכוי להחזיר אותם לבריאות מושלמת או להרוג אותם
  - שאלונים כגון זה:

**By placing a tick in one box in each group below, please indicate which statements best describe your own health state TODAY.**

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**DALYs**

**Disability-adjusted life year**

**One DALY = one year of healthy life lost.**

**DALY = YLL + YLD**

**DALY = שנות החיים האבודות + שנות החיים שנפגעו על ידי נכות**

**YLL - שנות החיים האבודות**

- $YLL = \text{מספר מקרי המוות} * \text{הפרש תוחלת החיים שלא מומש}$

**YLD - שנות החיים שנפגעו על ידי נכות**

- $YLD = \text{מספר מקרי המחלה} * \text{חומרת המחלה} * \text{משך הזמן של המחלה בשנים}$

חומרת המחלה:

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The QALY framework provided a basis for the development of the disability-adjusted life year (DALY) in the early 1990s.[4] The DALY tends to be used in the developing world, and has been widely adopted by the **World Health Organization**. The DALY is primarily a measure of disease burden, and thus relates to an entire disease (rather than a health state, as with the QALY).

Subjective Well-being:

## Personal Well-being 2012/2013



The **disability-adjusted life year (DALY)** is a measure of overall **disease burden**, expressed as the number of years lost due to ill-health, disability or early death. DALYs are calculated by combining measures of **life expectancy** as well as the adjusted quality of life during a burdensome disease or disability for a population. DALYs are related to the **quality-adjusted life year (QALY)** measure; however, QALYs only measure the benefit with and without medical intervention and therefore do not measure the total burden. Also, QALYs tend to be an individual measure, and not a societal measure.

### years of life lost (YLL)

The burden of living with a disease or disability is measured by the **years lost due to disability**

(YLD) - known as years lost due to disease or years lived with disability/disease.

YLD = כמות מקרים לאוכלוסיה \* "משקל נכות" סוגשל אחוזי נכות שמיוחסים לבעיה הספציפית \* ממוצע השנים של המחלה עד מוות או סיום המחלה

YLL = כמות מתים כתוצאה מהמצב \*

$$\text{DALY} = \text{YLL} + \text{YLD}$$

**One DALY = one year of healthy life lost.**

אוקולוסייה Daly, אינדידואלי בהתאם להתערבות Qal

## QALYS:

השקלול מבין 0 ל-1 מתבצע באמצעות אחת השיטות המוצעות ב-<sup>[5]</sup> Journal of Health Economics. פסק זמן (TTO): המשיבים מתבקשים לבחור בין הישארות במצב של בריאות לקויה לתקופה מסוימת, או חזרה לבריאות מושלמת עם תוחלת חיים קצרה יותר.

- **Time-trade-off (TTO):** Respondents are asked to choose between remaining in a state of ill health for a period of time, or being restored to perfect health but having a shorter life expectancy.

הימור סטנדרטי (SG): המשיבים מתבקשים לבחור בין הישארות במצב של בריאות לקויה לתקופה מסוימת, או בחירת התערבות רפואית שיש לה סיכוי להחזיר אותם לבריאות מושלמת או להרוג אותם.

- **Standard gamble (SG):** Respondents are asked to choose between remaining in a state of ill health for a period of time, or choosing a medical intervention which has a chance of either restoring them to perfect health or killing them.

סולם אנלוגי חזותי (VAS): הנשאלים מתבקשים לדרג מצב של בריאות לקויה בסולם שבין 0 ל-100, כאשר 0 מייצגים מתים ו-100 מייצגים בריאות מושלמת.

- **Visual analogue scale (VAS):** Respondents are asked to rate a state of ill health on a scale from 0 to 100, with 0 representing being dead and 100 representing perfect health. This method has the advantage of being the easiest to ask, but is the most subjective.

דרך נוספת לקבוע את המשקל הקשור למצב בריאותי מסוים היא שימוש במערכות תיאור סטנדרטיות כמו שאלון EQ-5D של קבוצת EuroQol, שמקטלג מצבי בריאות לפי חמישה ממדים: נייכות, טיפול עצמי, פעילויות רגילות (למשל עבודה, לימוד, שיעורי בית או פעילויות פנאי), כאב, אי נוחות וחרדה, דיכאון.<sup>[6]</sup>

**One QALY = one year in perfect health.**