Benefits and Costs of Psychotherapy

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Overview

Science perspective: Efficacy and benefits

Reality: Service provision and mental health systems in the EU

The science – practice gap: Ways forward?

„From a science perspective there is little doubt that psychotherapy is effective, highly beneficial and cost effective for the vast majority of mental disorders“ (NIH consensus meeting 2010)

Over 350 peer review papers each year since 1995, 85% refering to psychotherapy as cognitive-behavioral therapy (CBT) including:

- **Cochrane analyses**
- **Health Technology Assessment reviews**
- **Guidelines and meta-analyses (e.g. NICE, NIH)**
- **other types of metaanalytic or review papers targeting method, specific conditions and disorders and public health impact**

Science perspective: What is psychotherapy?

- **… science-based psychological health care technology for treating mental disorders** (and somatic disease with a significant psychological component) **by psychological means**
- **Core components - unspecific factors**
  - **Planned, structured, targeted interactional process**
  - **Therapeutic relationsship**
  - **use of psychological methods** (communication – cognition, affect, behaviour)

Plus

- **Core components – specific factors**
  - **use of empirical/experimental proven psychological means (rules/procedures)**
  - **Derived from scientific theories of normal and abnormal behavior**
  - **Typically various specific measureable goals** (reduction of suffering, symptom reduction, cognitive-affective and behavioral change)

Wittchen & Hoyer 2011, modified from Hans Strotzka 1980 (psychoanalyst) .

First line psychotherapeutic treatments with established efficacy

	Medication	Psychological
Anxiety disorders	+	+++
Stress-/Trauma-related dis.	+	+++
Depressive Disorders	**++(+)**	**++(+)**
Psychotic Disorders	+++	+ (adjuvant)
Bipolar Disorders	+++	+ (adjuvant)
Somatoform Disorders	+	++
Addictive Disorders	+	++
Personality Disorders	?	++
Eating Disorders	+	+++
Childhood disorders	? - +	++
Somatic + psychological	+	+ + (adjuvant)

Example: Psychotherapy and depression

CBT strong evidence for all outcomes
- Symptoms => drug tx
- relapse risk => drug tx
- longterm > drug tx
- social => drug tx
- cost =< drug tx

Other psychotherapies typically weaker effects, and considerably fewer studies

25 reviews past 5 years, 2 Cochrane reviews

Science perspective: Formal apects of evidence from CBT

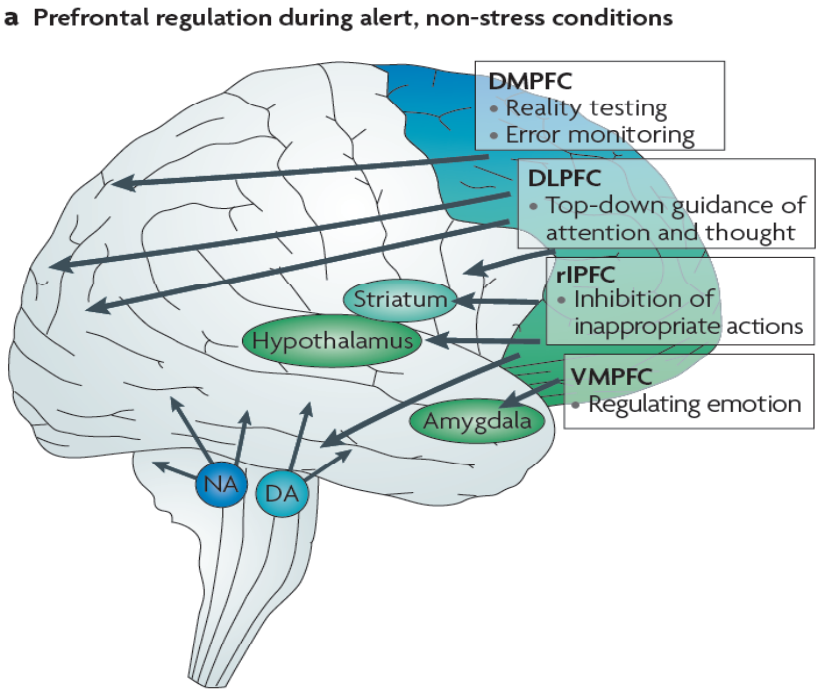
- **Robust effects within 10-25 CBT sesssions**
- **Highly structured and standardized procedural manuals** (covering diagnostic assessment, psychoeduation, diagnostically specific targets/procedures, course and outcome, booster session and post therapy elements)
- **Typically a broader range of therapeutic targets than drug therapy trials**
- **Tpically therapy effects persist over time**
- **Cost effectiveness: variable designs – variable findings – few real life data**
  - Slightly higher shortterm costs as compared to drugs (Germany: per hour direct cost of 75€ - 10-25 sessions: 750-2.000€)
  - evidence for general medical cost offset effects
  - Evidence for longer stability of post treatment effects
  - Together yearly psychotherapy costs lower than drug treatment (15-42%/year)

Science perspective: Psychotherapy is effective and we know why

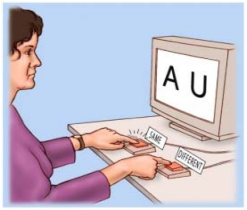
- **<u>Unspecific factors:</u> Effectiveness is established, eg**
  - **Therapeutic relationsship, structure, monitoring of sessions**
- **<u>Specific factors:</u> The neurobiological, psychological and behavioral mechanims of action is largely established** (e.g. depression, anxiety disorders)
  - **Neuroimaging studies** (e.g. „rewiring of the brain“, extinction learning/relearning)
  - **Genetic neuroimaging** (e.g. interaction with serotonergic gene mechanisms)
  - **Experimental dismantling studies** (e.g. identification of active ingredients)
- **The overall efficay and effectiveness is robustly established**
  - **Randomised controlled clinical trials and transfer clinical studies**
  - **Short and longterm effects: symptom, improvement, relapse prevention**
  - **A wide range of additional outcome domains (**disability, work performance, productivity, quality of life, well-being and social integration, development, secondary prevention)

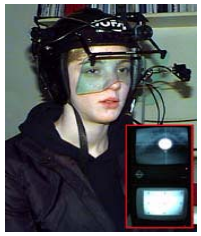
Example mechanism research: Integrated neurobiological, cognitive and behavioral longitudinal designs

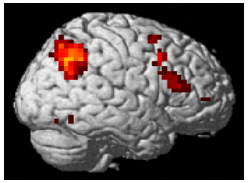
Funktional anatomy of cognitive control processes/interaction with affect

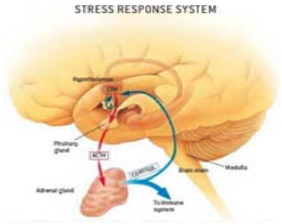


Experimental behavioral assessments

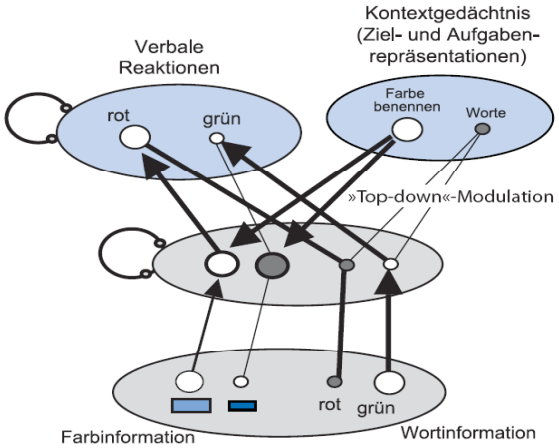






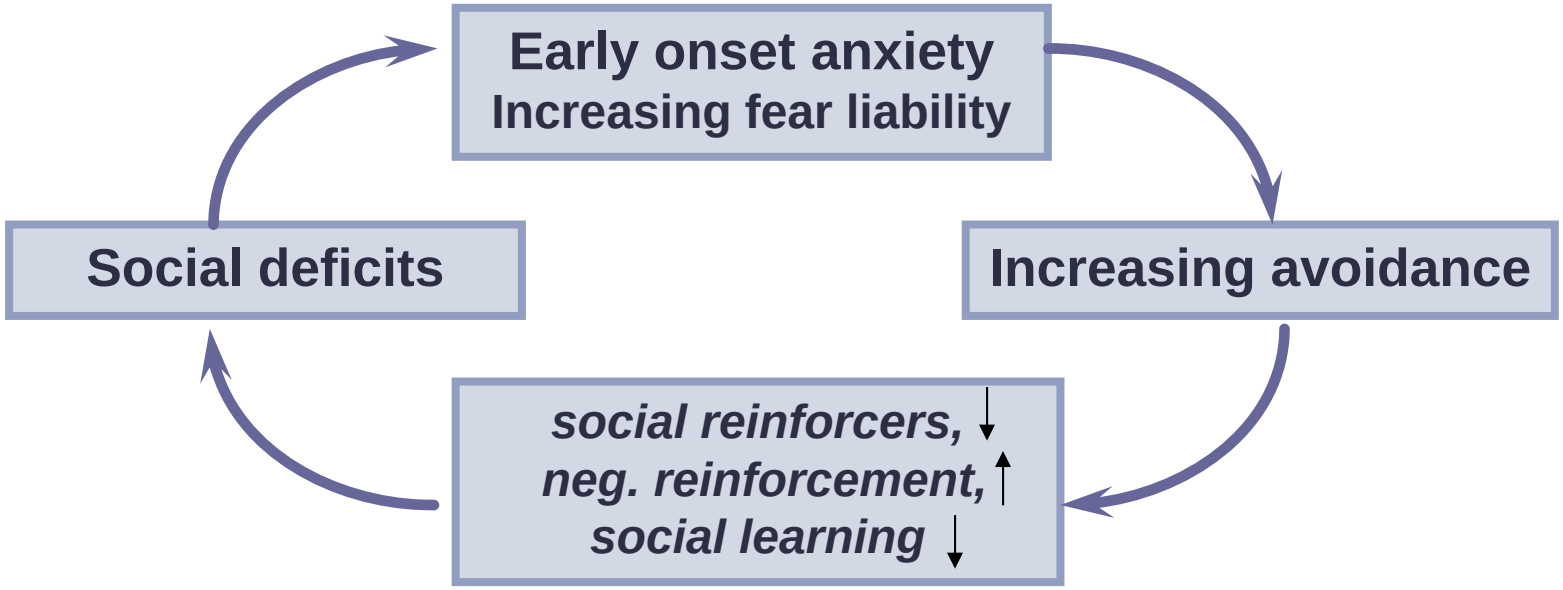


Computational Modeling

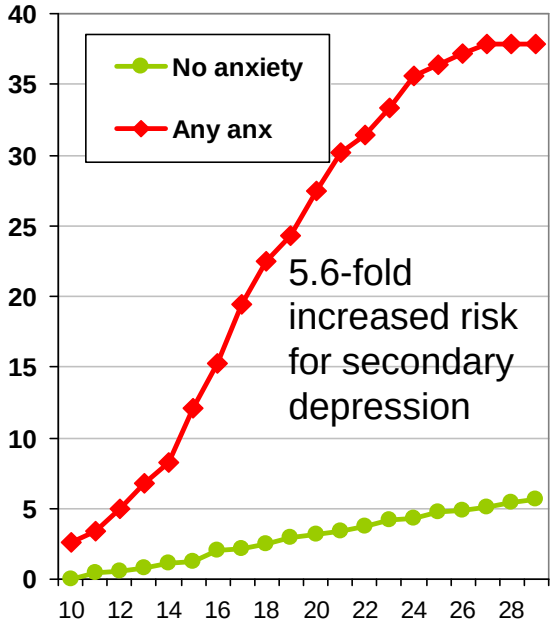


Despite impressive achievements our knowledge about processes and interactions between psychological and neural systems remains fragmented

Framework of developmental complications



Effect of prior anxiety disorders



Fear, anx, avoidance	**Impairment/disability**	**Demoralisation**	**Escalation**
Reduction of: - Social learning - Skills acquisition - Developm. Milestone achievement - Competencies	- School - Career & work - Social network -Higher-order cognitive functions	- Negative affect - Depression risk factors **Compensation** - Maladaptive choices - Substances	- ↑ Restrictions - ↑ Longterm disab. - ↓ Quality of life - Depression

Age/duration

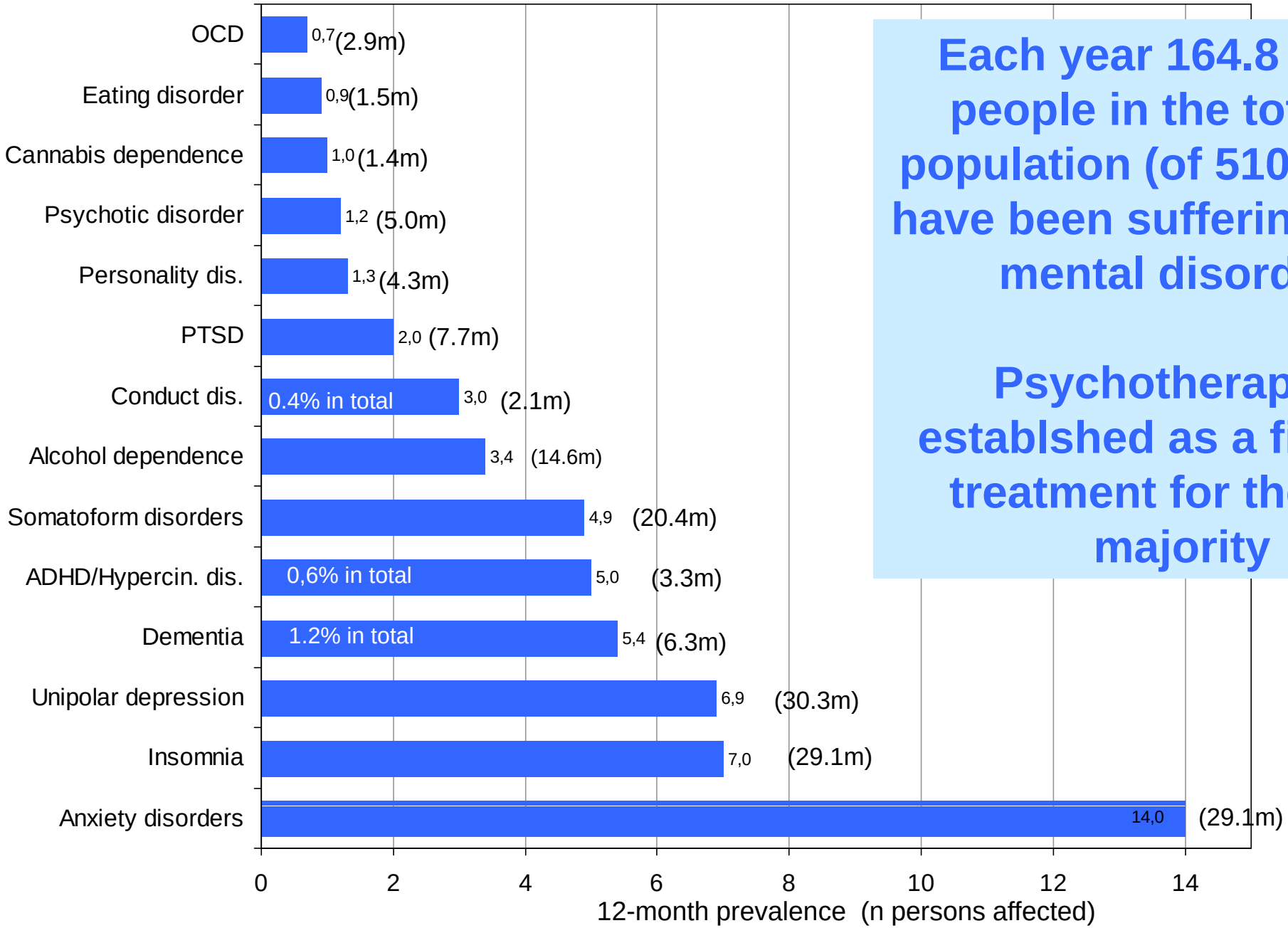
Overview

Science perspective: Efficacy and benefits?

Reality: Service provision and mental health systems in the EU

The Science – Practice gap:
Ways forward?

Mental Disorders in the EU by prevalence (estimated number affected)

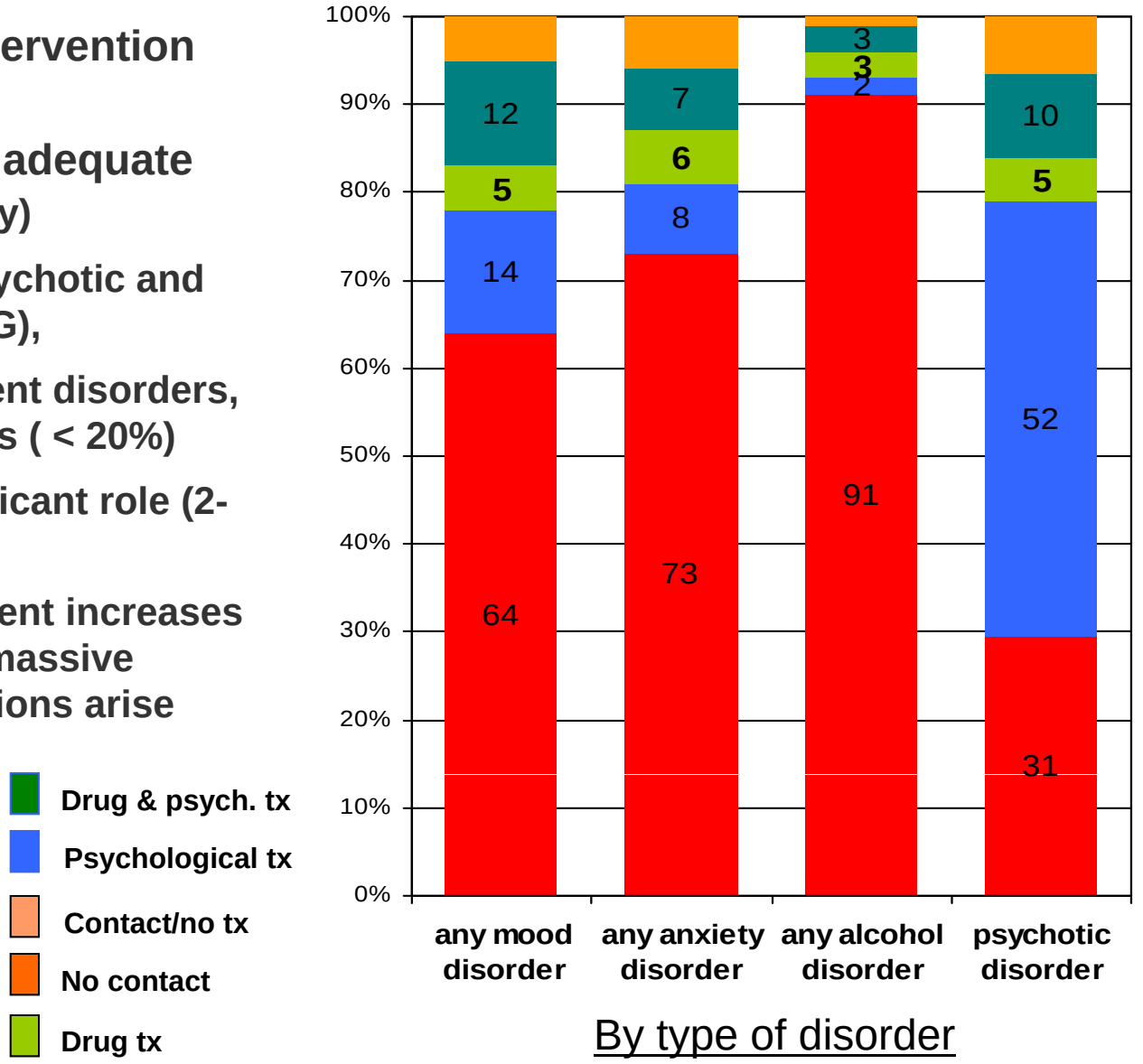


Each year 164.8 milion people in the total EU population (of 510 million) have been suffering from a mental disorders

Psychotherapy is establshed as a first line treatment for the vast majority

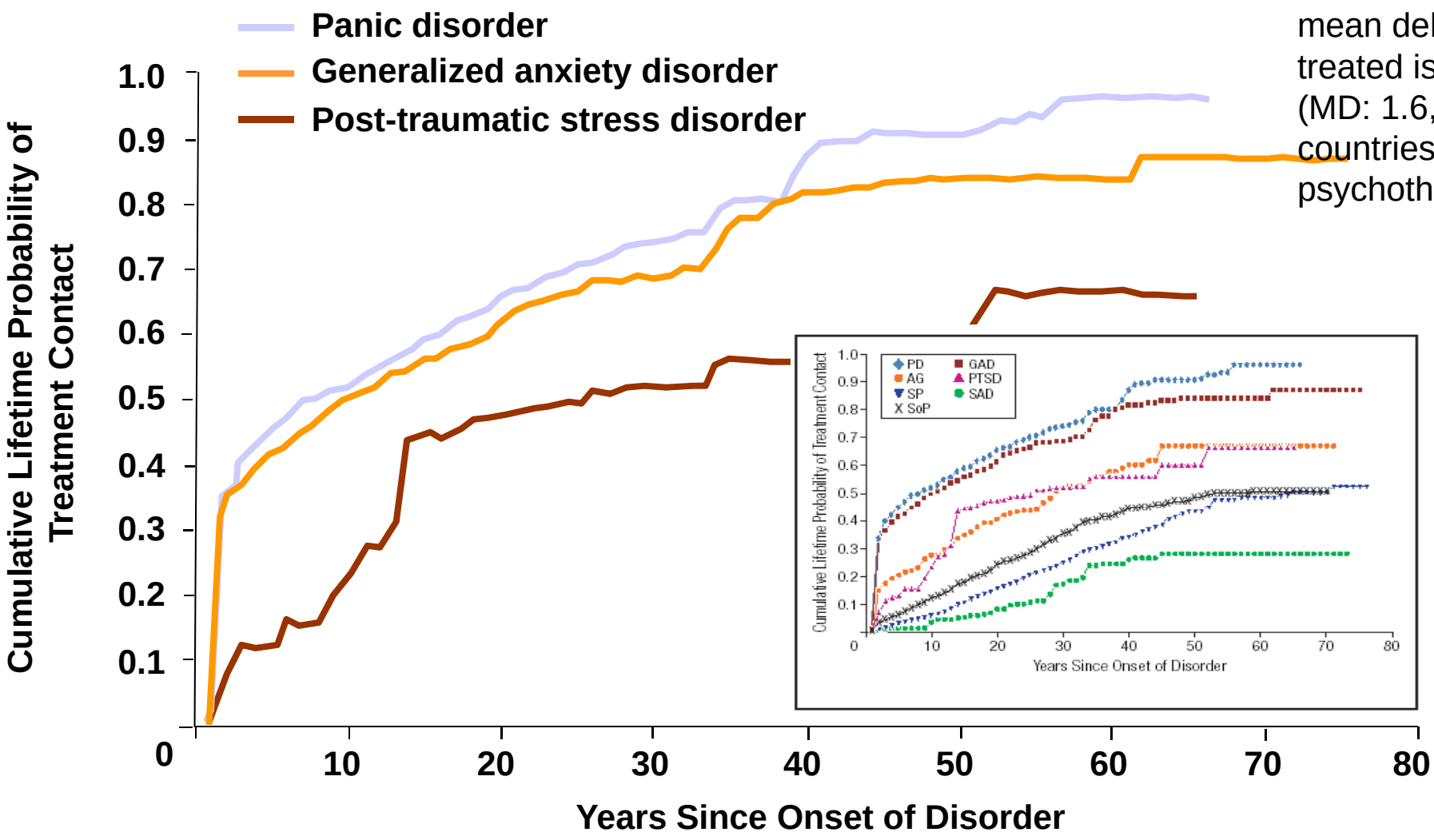
Only few receive a formal adequate treatment – even fewer (1-10%) psychotherapy!

- **Only one third receive any intervention**
  (Wang et al WMH 2008)
- **Only half of these a „minimal adequate treatment“ (drug, psychotherapy)**
  - **Highest treatment rates for psychotic and eating disorders (eg, >70% in G),**
  - **Lowest for child- and adolescent disorders, addictive and anxiety disorders (< 20%)**
  - **Psychotherapy plays no significant role (2-16% by diagnosis)**
  - **Probability of adequate treatment increases by illness duration and when massive comorbid comorbid complications arise**



By type of disorder

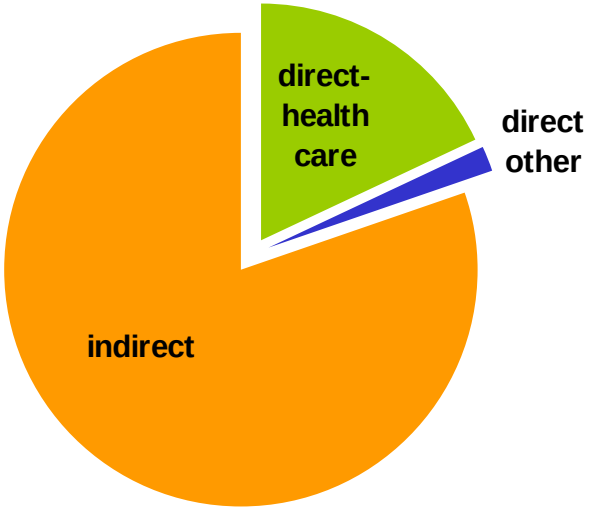
Treatment occurs typically delayed (WMH 2008)



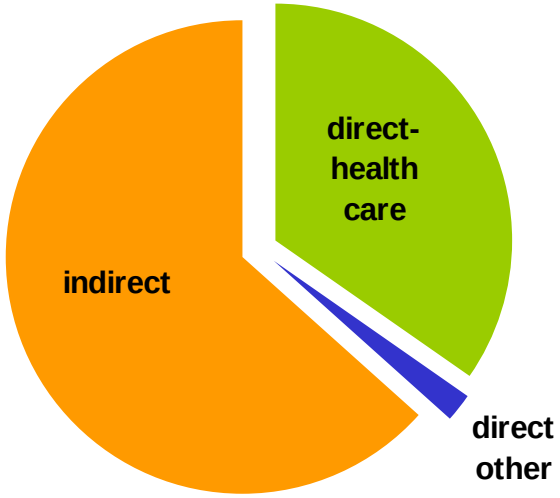
Even for depression the mean delay among treated is typically years (MD: 1.6, range by EU countries 1-6 years for psychotherapy

Distribution of costs for mental disorders are markedly different from other treatable diseases: A comparison

Anxiety



Depression

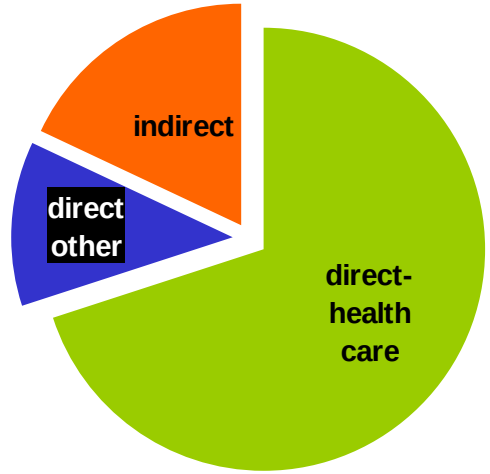


The cost burden of depression and other mental disorders is mainly determined by indirect costs!

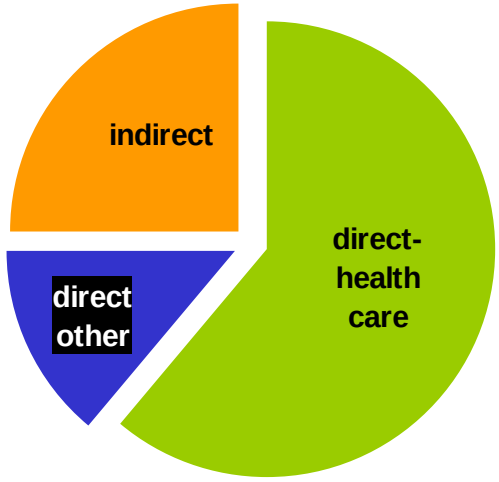
This contrasts sharply to the situation for prevalent somatic diseases

Would an increase of direct costs for better and timely treatment reduce indirect costs and the overall cost burden?

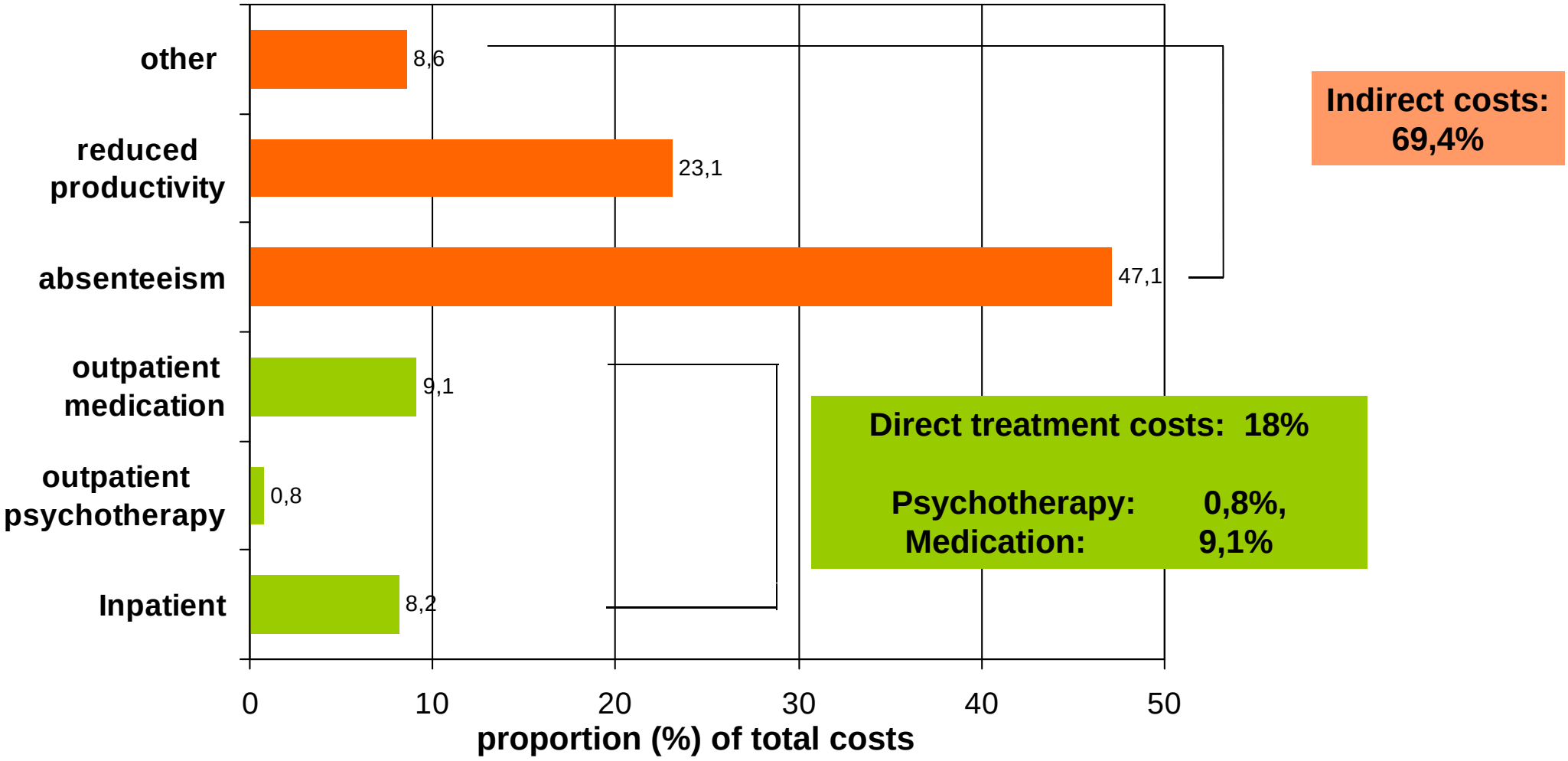
CVD



Diabetes



What are the major cost components of mental disorders?



Wittchen & Jacobi 2011

Conclusion: The overall treatment situation is deficient, psychotherapy plays a marginal role, direct cost expenditures are low

Despite effective pharmacological and psychological treatments

- **Of all 12-month cases with mental disorders**
  - **Only 30-52% (by country) had contact with any health professional**
  - **Only 8-16% (by country) with the mental health specialty sector**
  - **Only 2-9% has received minimally adequate treatment**
    - drug tx >1 month plus > 4+ visits OR psychotherapy >8 sessions
    - mostly drugs, psychological treatments rarely provided (0-3% of all affected)
    - Considerable treatment delays after onset: MD: 15.6 years
- **Degree of under- , delayed and poor treatment and cost burden structure is unique to mental disorders**
- **The situation (cost & burden) is getting worse due to an ageing population**

Overview

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The Science – Practice gap: Ways forward?

Why did we fail to exploit and capitalize on the benefits of psychotherapy?

The science-practitioner gap

Complex mental health care systems with different traditions and orientations

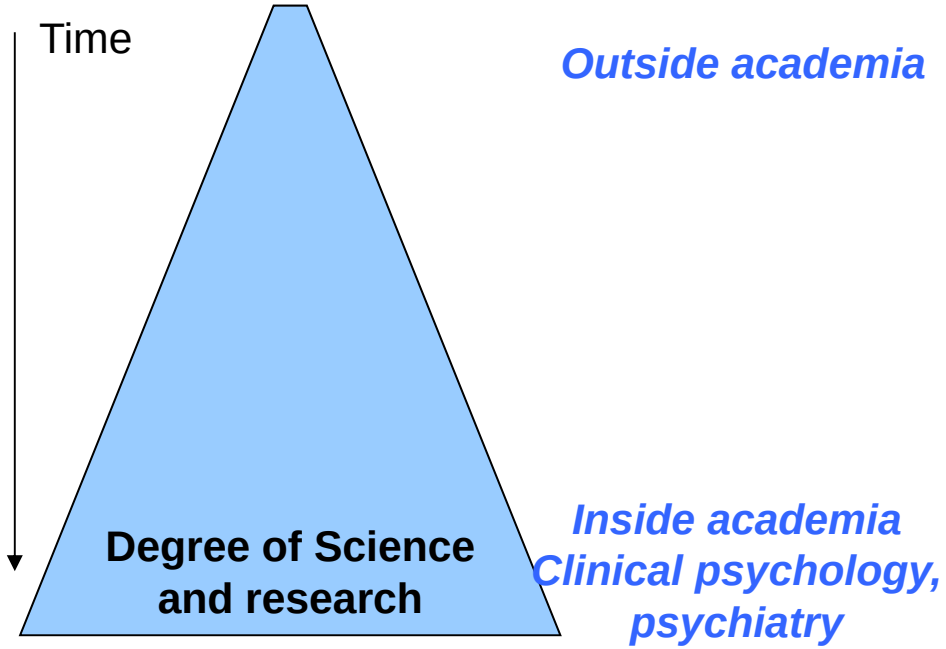
- poorly and variably defined role and scope of psychotherapy
- Restricted access, lack of transparency, not available on time
- Psychotherapists do not apply science-based psychotherapy
- Lack of availability of the most effective psychotherapy treatments

Diffuse concepts about what constitutes psychotherapy

- Lack of legal regulations of psychotherapy practice and psychotherapists
- Lack of transparency for the patient and the public
- Psychotherapists do not use state of the art methods

Diffuse concepts of what is psychotherapy - Lack of legal regulations of psychotherapy practice and psychotherapists

- **Hundreds of groups claim and use the psychotherapy**
- **Historical developments of orientations**
  - **Psychoanalytic**
  - **Psychodynamic**
  - **Client centered psychotherapy**
  - **„Humanistic approaches“** (i.e. Gestalt)
  - **Behavior therapy**
  - **Cognitive therapy**
  - **Cognitive-behavioral therapy (CBT)**
  - **Other:** Systemic psychotherapy approaches (e.g. family therapy) or interpersonal therapy (IPT)
- **Terminological confusion** (e.g. counseling, psychosocial interventions, psychological interventions, psychological therapies)



- **National legislation:** When introduced practitioners largely came from these historical orientations

Ignoring the Evidence: Why do psychologists and psychotherapists reject the science evidence?

(Newsweek Oct 2, 2009)

- **More weight to their personal experiences than to science**
  - **some patients get better no matter what therapy they have, due to unspecific effects and therapists remember and attribute these successes, wrongly, to their treatment.**
- **Deep ambivalence about the role of science**
- **Lack solid science training**
- **Rejection of cookbook medicine**
- **Difficulties to translate state of the art procedures into the reality of complex health care structures and regulations**

The science and reality gap: Little evidence that the most effective psychotherapy are applied

- **92% of the science literature in psychotherapy deals with CBT**
- **in practice this most effective psychotherapy is rarely provided**
- **If applied, the format and duration differs established science procedures** (i.e. 2-3 times longer, no behavioral components, little monitoring)
- **Confusion of boundaries**:
  - Is psychiatrists/physicians psychoeducation/counseling = psychotherapy?
  - Psychosocial interventions in addiction (OMT)?
  - Adiuvant Expressed Emotion Family Therapy in schizophrenia?
  - Crisis intervention and debriefing after trauma?

Ways forward towards capitalizing on the effectiveness and additional benefits of psychotherapy?

- **Scientifically, psychotherapy relies on** Psychology (including the Behavioral and Social Neurosciences), Clinical Psychology and Psychiatry
- **Make Psychology and Psychiatry responsible for mental health care and the delivery of state of the art psychotherapy**
  - Too few costly psychiatrists – changes unlikely
  - Introduce legislation for clinical psychologists in the EU (many, not costly)
  - And professionalize them as psychotherapists (by field: child/adolescent, addiction, mental disorders, etc)
  - Within strict quality assurance systems regarding their practice (allocation of patients, enforcement of state of the art effective 1st line treatments)
- **Launch a concerted Psychotherapy research program linked to a „Science of behavioral change iniative“**

Conclusion: Mental disorders are the core challenge of the 21st century

- **Mental disorders are prevalent (164.8 milion of the total 510 million EU population) and disabling (42% of all YLDs) = highest disease burden**
- **The cost burden is immense - not because of treatment** (direct) **costs**
  - **Only few get treatment – very few state of the art treatment – and if treated they are treated delayed**
  - **Psychologists and psychotherapy play currently a marginal role**
- **It is immense due to exceedingly high indirect costs and disabilities arising from no, delayed, or inadequate treatment**

➢ **Europe has to act and can act to reduce this burden by strengthening the field of psychotherapy**