Children – our most important resource

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3rd Nordic Family Center Conference
Providing family support through interprofessional collaboration
Rica Hotel Tromsø
Content

• The mental health challenge
• Recent developments in public child mental health
  – WHO
  – Global Burden of Disease 2010
  – Recent epidemiological findings
  – Norwegian developments
• Mental health promotion and illness prevention
  – Child care centres
• Barriers to child well-being to be negotiated
Svein (56), on disability award since 42
Hedda-Pernille Sørensen
8 years of age - ADHD
The Mental Health Challenge
Mental disorders is the biggest health challenge to Norway!

In terms of:

– Prevalence
– Children’s burden
– Sick leave costs
– Disability costs
– Lost years of work
– Mortality
– Burden of disease
– Cost of illness
Mental disorders is the biggest health challenge to Estonia!

In terms of:
– Prevalence
– Children’s burden
– Sick leave costs
– Disability costs
– Lost years of work
– Mortality
– Burden of disease
– Cost of illness

Estonian Minister of Finance
Jurgen Ligi
Mental disorders is the country’s biggest health challenge

Miklós Szócska, Minister of Health, Hungary
Prevalence

• Every third/second during life time
  • *Kringlen E. et al. 2001*

• Every third of us in one year
  • *Kessler & Ustun (Eds.), 2008*
  • *Wittchen et al., 2011*

• As usual as influenza
  – Some get healthy by themselves
  – Some experience life long illness
  – Some die
Psykiske lidelser blant barn og unge: Tallet er 8

Det gjelder hver 12. av oss

- 15-20 % psykiske plager (symptomer)
- 8 % psykiske lidelser (diagnoser)
- Før pubertet: 2 av 3 gutter
  - Utviklingsforstyrrelser, ADHD, språkvansker, lærevansker
- Etter pubertet: 2 av 3 jenter
  - Angst, depresjon, spiseforstyrrelser
Barn i Norge med minst én psykisk syk eller alkoholmisbrukende forelder - siste år

- Psykisk lidelse: 410 000 (37,3 %)
- Alkoholmisbruk: 90 000 (8,3 %)
- Totalt: 450 000 (40,5 %)
- Høyre tall i løpet av hele oppveksten
- Vanlig å ha foreldre som oppfyller kriteriene for psykiatrisk diagnose, slik det er vanlig å en forelder med diagnostiserbar fysisk sykdom
Hver åttende barn hadde siste år en mor eller far med alvorlig psykisk sykdom eller alvorlig alkoholmisbruk (alkoholavhengig)

- Psykisk sykdom: 115 000 (10,4 %)
- Alkoholavhengig: 30 000 (2,7 %)
- Totalt: 135 000 (12,2 %)
Work related illness by industry

Figures from Dame Carol Black’s Review of the health of Britain’s working age population (2008)
Work absence: Main causes of paid sick leave

Figure 2.13 Sick notes issued by medical condition

- Mental ill-health
- Circulatory and respiratory
- Musculoskeletal
- Injury and poisoning
- Nervous system

Source: Gabbay and Shiels
Disability awards: Change in main causes
Disability award:
Muscle/skeleton diseases most frequent reason

![Graph showing disability award trends from 1992 to 2003.](image)

**Fig 1:** Nye uførepensjoner og diagnose, årlig utvikling 1992 - 2003

Disability awards for mental disorder start at young age

Disability awards for muscle/skeleton start at old age

Age at disability award in Norway (2000-2003)
Lost work years because of mental illness: Average: 21 years per disability award

Mykletun A. & Knudsen AK., NIPH, 2004
Lost work years due: EU-27

Distribution of years lost due to disability according to disorder groups in EU-27 population, source: WHO burden of disease study 2004
Burden of disease, EU-25

• ¼ of all burden of disease in Europe
  – Disability adjusted life years lost – DALY

• 50% more than burden from all cancer illness
• 50 % more than burden from all coronary heart disease
• 4 x burden from all lung diseases
• 4 x burden of all road traffic accidents

• Andlin – Sobocki, Jönsson, Wittchen, Olesen, 2005
Half of cost of illness due to depression, Sweden

<table>
<thead>
<tr>
<th>€ PPP mill</th>
<th>Health services</th>
<th>Direct non-medical</th>
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<td>554</td>
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<td>752</td>
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Olesen et al. (2007). Cost of mental illness by type of mental illness
Depression: 86 % indirect costs
Indirect costs more than doubled in 7 years, Sweden

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<td>91</td>
<td>110</td>
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<td>Medicines</td>
<td>74</td>
<td>88</td>
<td>99</td>
<td>113</td>
<td>127</td>
<td>130</td>
<td>114</td>
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<td>Sickleave</td>
<td><strong>286</strong></td>
<td>330</td>
<td>450</td>
<td>558</td>
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<td>905</td>
<td>1145</td>
<td>1146*</td>
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<td>Disability</td>
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<td>1260</td>
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<td>Death</td>
<td>208</td>
<td>225</td>
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<td>245</td>
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<td>234*</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>1739</strong></td>
<td>1911</td>
<td>2168</td>
<td>2532</td>
<td>2981</td>
<td>3166</td>
<td>3528</td>
<td>3532</td>
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</tr>
</tbody>
</table>

Productivity loss from depression far higher than from diabetes and coronary diseases

Distribution of depression cost is markedly different from other treatable diseases: A comparison with two other common somatic illnesses

Mortality: Premature death following depression as likely as for cigarette smoking

**Depression**
Adjusted for age, gender, somatic symptoms/diagnoses:

+ 52%

HR = 1.52 (95% CI 1.35-1.72)

**Tobacco smoking**
Justert for alder, kjønn:

+ 59%

HR = 1.59 (95% CI 1.44-1.75)

Suggested total cost of mental illness in Norway:
9 billion Euro/year

Norway
• 1800 Euro x NOK x 5 mill
• 9 billion Euro/year

*2004 NOK, change rate, adjusted for cost level difference Norway - UK

UK
• Total cost: 77 bill GBP/year
  • Lost work
  • Social services
  • Treatment
The mental health challenge - summarised

1. Every second/third of us get it at least once in our lifetime, every third of us in a year,
2. Every 12th child has it
3. Every 8th child has a mom or pa with a severe disorder
4. ¼ of all burden of disease in Europe
5. More expensive than any other illness: 9 bill Euro/year
6. Disability burden 50% > all cancers and heart diseases
7. 40 % of registered sickness leave and disability costs
8. Costs increase – particularly among young adults
9. 21 lost work years per disability award
10. Deadly as tobacco smoking (depression)
12. Depression alone represents half of the costs
13. Direct treatment cost for depression: 10-20%
14. Costs due to consequences of depression: 80-90%
15. Sick leave costs depression doubled in 7 years (Sweden)
16. More skewed cost distribution than any other illness
17. Easier to prevent and treat than most other mental disorders (Cuijpers et al. 2009)
High cost because of:

- High prevalence, many affected
- Low and decreasing age of debut
- Interferes with education
- Interferes with entry to work market
- Promotes expulsion from work market
- Leads to repeated long-term work absence
- High disability insurance, particularly young adults
- High mortality

- Judd et al., 1998; Ustun et al., 2004; Smit et al., 2006
High cost because of:

- High prevalence, many affected
- Debut in childhood/adolescence
- Decreasing age of debut
- Interferes with education
- Interferes with entry to work market
- Promotes expulsion from work market
- Repeated longterm work absence
- High disability insurance, particularly young adults
- High mortality

- Judd et al., 1998; Ustun et al., 2004; Smit et al., 2006
Recent developments
Recent developments I

WHO Mental health action plan
2013–2020
Objective 3: Countries should implement strategies for promotion and prevention in mental health

• Provide early childhood programmes that address the cognitive, sensory-motor and psychosocial development of children as well as promote healthy child-parent relationships.

• Provide services and programmes to children and adults who have experienced adverse life events that address their trauma, promote recovery and resilience, and avoid re-traumatizing those who seek assistance.

• Protect children from abuse by introducing or strengthening community child protection networks and systems.”
Recent developments II

The Global Burden of Disease Study 2010 (GBD 2010)
The Global Burden of Disease Study 2010 (GBD 2010)

- Systematic and comprehensive assessment of data on 291 diseases and injuries and 235 causes of death for 20 age groups, both sexes, and for 187 countries
- Producing estimates of mortality and of non-fatal health outcomes
  - Disability adjusted life years (DALY)
  - Years of life lost (YLL)
  - Years lived with disability (YLD)
- The Lancet, special issue, December 2012
Mental and behavioural disorders

- Main cause of global disability (7.4% of DALYs)
  - 40% depression, 15% anxiety, 8% schizophrenia
- 23% (177 million) Years Lived with Disability (YLD)
- Largest contributor to disability after lower back pain
- Severely underestimated
  - Mental disorders as cause of death not accounted for
  - Social environment as cause of death not accounted for
Depression & disability burden

• Burden of major depression and anxiety each increased by 37% in 20 years
• Depression now alone accounts for 8.1% of YLDs
• 2-3 times greater than cardiovascular and circulatory diseases (2.8% each) because these occur in later life
• Second only to low back pain
• No epidemic of common mental disorder
• Increase due to changing demographics
Mental disorder
Global burden of disease among young people

• Mental and neurological disease including drug abuse and self harm is the leading cause of global burden of disease among young people (10-24 år)
• More than traffic accidents (12%)
• More than communicable diseases including HIV/AIDS (10%)
• No valid numbers for mental disorders among small children
  – Gore et al., 2011
Recent developments III

News from International congress of the International Federation for Psychiatric Epidemiology, June 2013
Course of mental problems in Europe

- Every fifth child (20%) has a mental health problem
- 7-8% have a diagnosable mental disorder
- Two years stability: 50%
- Hyperactive/inattention most stable
- Conduct and peer problems decrease by age
- Emotional problems increase by age – particularly girls
- Simultaneous exposure to several risk factors increase mental health problems markedly
- Adverse family climate is the most challenging threat
  - Klasen & Raven-Sieberer, 2013; Klein, Otto, Fuchs, Klitzing, 2013
Parents and children disagree when they reporting on children’s mental problems

- Low agreement on both internalising and externalising disorders
- Parents more than children report externalising
- Children more than parents report internalising
- Parents’ mental disorder and attitudes increase higher reporting
- Socio-economic status increases child reporting
- Children’s opinion must be heard when assessing mental disorder

- Bajeux, Leray, Constant et al., 2013
Epidemic of common mental disorder?

- There is no epidemic of mental disorders among children or adolescents
- Seemingly increase last 30 years, disappears when controlling for the length of the interviews
- No change in prevalence only in the way we do interviews
- From brainlessness to mindlessness
  - Costello et al., 2006
Somatisation, stability, relative age

- Somatisation during childhood is a robust predictor of later common mental disorder
  - Shanan, Copeland, Zucker, Angold, Costello, 2013
- Half of those with a common adolescent mental disorder have no further similar disorder in young adulthood
  - Patton, Coffey, Romaniuk, O’Loughlin, Degenhart, Olsson, Carlin, 2013
- Being the youngest one in a cohort is a risk factor of mental distress
  - Patalay, Deighton, Wolpert, 2013
Antenatal depression

- Exposure to maternal depression in utero increases risk of adolescence depression in girls, not in boys
- Exposure to postnatal maternal depression increases the risk of adolescence depression in boys
- Differential moderation by gender to the timing of maternal depression suggest that there are different pathways from antenatal and postnatal depression to future depression risk
- May suggest maternal to fetal cortisol transfer
- Need early intervention on depression in pregnancy
  - Evans, Stein, Quarini, et al., 2013
Alcohol during pregnancy

• Binge drinking during pregnancy predicts later emotional and behavioural problems in boys (7 yrs)
• … also – but to a smaller extent – in girls
• Binge drinking tends to occur in early, unrecognised part of pregnancy
• No effect of cumulated alcohol found in a recent large Danish study
• Need strengthening of information campaigns
  • Niclasen et al., 2013
Pregnancy and early postnatal nutrition

• Unhealthy foods during pregnancy predict both internalising and externalising problems among children throughout early childhood

• Children with high levels of unhealthy postnatal diet develop higher levels of internalising and externalising problems

• Children with low levels of postnatal wholesome diet develop higher levels of internalising and externalising problems

  • Jacka, Ystrøm, Brantsaeter, Karevold, Roth, Haugen, Meltzer, Schølberg, Berk, 2013
Important events in Norway

• New Child Ombudsman (Barneombud)
• Municipality Health Law (2012)
• Public Health Law (2012)
• Minister of Health who declare himself as minister of health, not minister of hospitals
• Public Health Bill (Folkehelseemeldingen), 2013
• Child care center bill (Barnehagemeldingen), 2013
• Child protection bill (Barnevernmeldingen), 2013
• Mental health action plan 1999-2008 (Opptrappingsplanen for psykisk helse)
Recent developments IV

Mental Health Action Plan 1999-2008
Help to people with mental disorders has failed at all levels!

Help to did for people with mental disorders has failed at all levels!

Unanimous Norwegian Parliament, 1998
National programme for mental health
1999 – 2008

8 000 000 000 Euros
National Programme for Mental Health

- Prioritised the most severe cases – children/youth
- Human rights, human dignity
- Could not accept people freezing to death in a container because of schizophrenia/drug abuse
- Comprehensive reform of mental health care - for those who were already ill
National Programme for Mental Health

- No goals for:
  - Prevention
  - Public health
  - Cost-effectiveness
  - Society economy

- No reduction in mental disorder in the population

- Large increase in disability award cost

- Particularly among young adults

Øyane DPS, Fjell municipality
Svein (56), on disability award since 42

Depresjon
Hedda-Pernille Sørensen
8 years of age - ADHD
Hvis jeg ikke tar medisinen min, kan jeg bli ganske vill og sannen.


det som inngår.

Enkel metode kan avsløre ADHD

Enkel metode

Vår nye metode er en veldig enkel måte å henge opp barn i dagstavle-

tyen, spesialforhandler og Sniper ved Folkehelseinstituttet, Hjort Aasen.

Forsøk på ett par av captivity

Forsøk på et par av captivity

Sværer på spørsmål

De 1609. kontakten av ADHD er begynnelsen en del av revisjonen.

Sliper smeltemer

Compliment viser klare at andre behandlingsmønster som forfremde

Benedict Johanne Tveit Oppi (8)

ADHD-studien

Benedict Johanne Tveit Oppi (8)

Enkel metode kan avsløre ADHD

Et sporsmalsskjema til

Hedda-Pernille Sørensen (8)

fikk hjelp som fireåring

ADHD

Helped at 4 years of age
Not prioritised in Escalation plan for mental health
We cannot combat common mental disorders by continuing to build out specialised health services!
Prevention
We must prioritise preventive initiative according to public health, cost-effectiveness, and society economy!

In terms of:

– Prevalence
– Children’s burden
– Sick leave costs
– Disability costs
– Lost years of work
– Mortality
– Burden of disease
– Cost of illness

Norwegian Minister of Finance
Sigbjørn Johnsen
Concept of prevention

• Intervention before disease occurs
• Reduces number of new cases (incidence)
• Effective only if incidence is lower after intervention than if not intervened
Prevention and treatment

Forebygging

Selektiv

Universell

Indikativ

Identifisering av sykdom

Standardisert behandling av sykdom

Gjennomføring av langtidsbehandling
(Mål: reduksjon av gjenåpning tilbakefall

Etterbehandling
(Inkludert rehabilitering)

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Ten principles for a mentally healthier population
Health promotion and illness prevention: a success story
Infant mortality in Norway
Boys and girls, 1967-2008

Source: Norgeshelsa/MFR
No of deaths pr 1000 born

Average life expectancy (years)

- Women
- Men
- Children

[Graph showing trends in deaths and life expectancy over time]
Coronary heart disease and stroke mortality in Norway
Men, 45-64, 65-79 and 80+ years, 1990-2009

Source: Norgeshelsa/DÅR
Road traffic deaths in Norway
Men, all age groups and by age, 1970-2009

Source: Norgeshelsa/DÅR
Tobacco smoking in Norway
Adults, 16 - 74 years, 1972-2009

Source: Norgeshelsa/SSB
Suicides in Norway
Men and women, 1970-2009
N per 100 000 inhabitants

Source: Norgeshelsa/DÅR
Caries free teeth in Norway
5 and 12 olds

Source: Norgeshelsa/SSB
No change in incidence of mental disorder

• In Norway
  – *Psykiske lidelser i Norge, FHI-rapport, 2009*

• In Europe
  – Wittchen et al., 2011

• In USA
  – Kessler et al., 2005

• Elsewhere in the world
  – Kessler & Ustun, 2008

• No major evidence based attempt to do it
Promoters of mental health

1. Sense of identity – who I am
2. Meaning in life – something larger than oneself
3. Mastry – can do something
4. Belonging/affiliation – belong somewhere
5. Security – feel, think, act without fright
6. Social support – share inner thoughts and feelings
7. Social network – shared social reality
Good mental health

1. Sense of Identity/integrity: «I know who I am»
2. Meaning: «Somebody needs me»
3. Mastry: «I am competent at something»
4. Beloning/attachment: «I know where I belong»
5. Security: «Somebody loves me, whom I trust and who take care of me»
6. Social support: «I have somebody to confide in, whom I can share my inner thoughts and feelings with»
7. Social network: «Luckily, there are somebody out there who knows me, whom I can share my experiences with»
Threats to mental health:
Social disintegration

- National and international conflicts
- Poverty
- Unemployment
- Drop out of school etc
- Disintegration of local community, village, social network, school, church, family
- Violence in close relationships
- Bullying
- Social marginalization/stigmatization
When mental health fails

1. «I am nobody» (Loss of sense of identity)
2. «Nobody needs me» (Loss of meaning)
3. «I can’t do anything right» (Loss of mastery)
4. «I don’t belong anywhere» (Loss of affiliation)
5. «No one bothers about me, I have nobody I can trust, nobody cares for me» (Loss of security)
6. «I have nobody to talk to» (Loss of social security)
7. «Nobody shares my reality, nobody knows me» (Loss of social network)
Sources of health promotion

- Family
- Kindergarten
- School
- Friends
- Work place
- Local community
- Culture og sports
- Old people’s home
This is how we strengthen children’s mental health and well-being, prevent mental disorder and get a more sensible national economy:
1. Maksimise mental capital rather than prevent mental disorder

- Mental capital is the country’s most important resource – and the least developed one as compared to its potential
- Mental capital: A population’s total potential to develop security, autonomy, creativity, use emotions, think smart, control behaviour, create social networks, and master challenges
- Systematic development of a population’s mental capital is likely to prevent more mental disability than interventions designed directly to prevent specific mental illness
Mental capital

• A society’s potential to develop
  – Security
  – Autonomy
  – Creativity
  – Emotions
  – Thinking
  – Behaviour coordination
  – Social networks
  – Cope with challenges
2. Prioritise according to burden of disease (BD) and population attributable fraction (PAF) rather than to degree of severity

• The common disorders: depression, anxiety disorders and alcohol abuse

• Burden of disease from depression (EU-25):
  – 3-4 x schizophrenia
  – 3-4 x bipolar disorder
  – 3 x suicide
  – 3 x personality disorders

• Depression: No single illness costs more to the society

• 85-90% of the costs of depression are indirect costs
### Burden of disease in EU 25 (DALY) 2005: Mental disorders

<table>
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<th>Condition</th>
<th>Total mill. DALY</th>
<th>% of total</th>
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<td>1. Unipolar Major Depression</td>
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<tr>
<td>2. Schizophrenia</td>
<td>2.3</td>
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<tr>
<td>3. Bipolar disorder</td>
<td>1.7</td>
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<tr>
<td>4. Obsessive-compulsive disorder</td>
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<td>5. Panic disorder</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>6. PTSD</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>7. Self harm</td>
<td>2.2</td>
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<tr>
<td>8. All mental disorders</td>
<td>15.3</td>
<td>15.4</td>
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</table>

National Institute of Mental Health Publication No. 014586
3. Prioritise conditions that we **can** prevent rather than conditions we **wish** to prevent

- We must prevent unnecessary negative effects of having to live with bipolar disorder, schizophrenia, anorexia nervosa, autism and ADHD
- But we do not yet know how to prevent these disorders
- Fortunately, we can to a certain degree prevent the most costly mental disorders to society: depression, anxiety disorders and alcohol abuse
4. Prioritise health promotion rather than illness prevention

- Learn from the big success in preventing illness and death from physical conditions:
  - Reduced infant mortality
  - Reduced mortality from:
    - Coronary heart disease
    - Stroke
    - Several cancer illnesses
    - Suicide
    - Tobacco smoking
    - Road traffic accidents
  - Less caries in children’s teeth
  - Life expectancy increased significantly
What can we learn from the success with physical illness?

• Although the success was due not only to health interventions, we did something right:
  – Long term investments
  – Multi-method approach
  – Act on indicative evidence
  – Address exposure factors: Diet, smoking, exercise
  – Knowledge: Kindergarten, school, mass media
  – Competence: Show how you do it
  – Self-efficacy: Everyone can achieve something
  – Laws, regulations and tax-policy

• Mental health: family, kindergarten, school, friends, work, parent competence, coping with strain/depression, mental health literacy
5. Prioritise cost-effective solutions, not only degree of severity and human suffering

• Politicians tend to prioritise the most severe conditions rather than cost-effectiveness and cost-benefit

• Find the most cost-effective interventions

• E.g. Impact of long term kindergarten on later mental health:
  – Only dependent upon kindergarten quality
  – Low quality: no effect and negative cost-benefit
  – High quality: Very good cost-benefit for children’s mental health and for society economy
Depression: Better cost-benefit of prevention than for any other single disorder

- 85-90% of total costs are indirect costs
  - Sobocki et al, 2007
    - Reduced effectiveness at work (Work presenteism)
    - Lost work hours
    - Illness leave costs
    - Disability award costs
- Higher than for any other disorder (also physical)
  - Berndt et al, 2000; Broadhead et al, 1990
- Indirect costs more than doubled in 7 years (Sweden)
6. Prioritise interventions towards the general population rather than interventions targeting high risk groups or individuals at risk

- Intervention targeting high risk groups and individuals can be very effective for those they reach.
- But, most people are not reached by such interventions because people do not seek help for mental difficulties before they become ill.
- Although the mean impact may be small for the individual, health promoters regard universal interventions targeting the whole population as most cost-effective to the society.
- As for physical health, we believe that this is true also for mental health.
7. Prioritise arenas outside rather than inside the health care services

- Health is produced where people live their lives
  - In the family, kindergarten, school, work place, municipality
- The health care services do not produce health, they repair it
- Most important arenas are family, kindergarten, school
- Better health care services have hardly any impact on public mental health in high income countries
8. Prioritise the first years of life

- Strong evidence that most mental disorders start in childhood and adolescence, rarely disappear by themselves, and significantly increase risk of co- and multimorbidity later in life
  - de Graf et al., 2011; Kessler et al., 2011, Beesdo et al., 2010, 2009

- Such patterns increase the psychosocial disability and contribute strongly to the society’s burden of disease from mental disorder
  - Wittchen et al., 2011
Children better than bank and stocks!

Nobel laureate in economy, James J. Heckman
9. Aim to reduce the level of mental distress in the community rather than the number of clinical cases

- Like the number of alcohol related illnesses in a community follows from the total intake of alcohol, the number of mental disorders follows from the level of mental distress
- Alcohol related illnesses in a community is most effectively reduced by reducing the total intake of alcohol in the community (availability and price)
- Probably we can reduce the number of depressions in a community most effectively by reducing the level of mental distress
- Proof is still lacking, but the hypothesis can be tested. You can do it!
10. Prioritise interventions with a plan and a budget for independent scientific effect evaluation. Avoid interventions with no such plan and budget

- Like medical treatment, prevention should be evidence based
- Forbid use of large amount of money on health promotion and illness prevention with no plan and budget for independent, scientific assessment of:
  - Implementation (Is it feasible?)
  - Effect (Does it work?)
  - Cost-benefit (Does it pay off?)
  - User satisfaction (Do people want it?)
- Otherwise, we do not learn from our experience and waist money
The Current Status of Evidenced-based Prevention Practice

“The gap between what we know and what we do is bigger than the gap between what we know and what we don’t know”

Evidence-based interventions (EBIs) that are rigorously demonstrated to have long-term impact are rare.

Sources: Foxcroft et al., 2003; Greenberg, 2009
Principles of promotion - summarised

1. Mental capital before mental disease
2. Burden of Disease and Population Attributable Fraction rather than severity
3. Possibilities before wishes
4. Health promotion before illness prevention
5. Cost-benefit before political correctness
6. Universal before targeted
7. Outside before inside health services
8. First years of life before later years
9. Level of distress before number of cases
10. Evidence before good intentions

Holte, 2012
Clinical treatment

• Of course, clinical treatment for mental disorders should be as available, affordable, and effective as for physical illness
• Of course, we shall take care of those who suffer the most
• But, if we wish to reduce the number of new cases of mental illness in the community – i.e. prevention – such interventions hardly have any effect
Concrete grips
Grips to promote children’s mental health

- Regular monitoring of distress/SWB in municipalities
- Child care center as local center for children’s health
- Organise children’s health around child care centers
- Family centers (Familiens hus) in all municipalities
- Mental health as the goal of child care centers
- Community psychologists in all municipalities
- Health controls moved to child care centers
- Merge pedagogical service and school health service
- Systematic assessment off all children’s emotional, social and cognitive development in child care centers
- Continuous effect evaluation of all larger health initiatives
- Good and independent quality control procedures
And if you should choose one initiative? What would you prioritise?
• Radically new situation in Norway:
  • More children in child care centers than at health care station (98% of 4-year olds)
  • From early age (80% of 1-2 years)
  • Every body is there!
  • Every day
  • Continuously for several years
  • Natural interplay with other children
  • Observed by trained professionals
  • Who meet the parents twice a day
  • Unique arena for health promotion
Children attending a child care center (n)

Source: Child statistics, Statistics Norway
Ten principles for a mentally healthier people

1. Mental capital as a aim – strengthen child mental health
2. Population attributable fraction (PAF) as target
3. Address what you can influences – child development
4. Positive cost-benefit balance – child care centres pays off
5. Arenas outside health sector – child care centres
6. Universal interventions – child care centres reach all
7. Promotion – identity, mening, mastry, belonging, security, social support, sosial network
8. Small kids – child care centres from one year of age
9. Municipality level of well-being and mental burdens – ?
10. Independent effect evaluation – solid evidence

Holte, A. Ti prinsipper for forebygging av psykiske lidelser, Tidsskrift for Norsk Psykologforening, 49, 693-695, juli, 2012
| 1 + | Parental leave 1 year with > 50 % payment |
| 2 + | National plan for prioritising of vulnerable children |
| 3 + | Subsidised, regulated care for > 25 % of children < 3 years of age |
| 4 + | Subsidised, licenced preschool/child care centre for > 80% of 4 y olds |
| 5 - | 80 % of child care centre employed have child care education |
| 6 - | 50 % of child care centre employed have > 3 y relevant education |
| 7 - | 1 child care teacher with preschool education per 15 children |
| 8 + | 1 % av GNP to services for preschool children |
| 9 + | Child poverty rate < 10% |
| 10 + | General availability of important child health services |
• The most comprehensive mental health initiative for small children since World War II?
Detrimental to child mental health?

• The youngest ones – > 1 – 1 ½ y?
• Secure attachment?
• Good enough cognitive stimulation?
• Negative long term effects to:
  – Feelings - emotions?
  – Thinking - cognition?
  – Behaviour?
• Several studies from USA:
  – Restless, uneasy
  – Aggressive, conduct problems
  – Generalisable?
  – Selection effects?

• Research strong USA dominance
• Large literature reviews conclude; child care centres increase behaviour problems
• Child care Europe - USA differ
  – Structure of society
  – Child, family, and health policies
  – Standard, availability affordability of child care centres
• Need more relevant studies
  • Bradley & Vandell, 2007; Jacob, 2009
Early start detrimental to child mental health? Lekhal et al., 2011/2012

- Norwegian prospective study of child care, age at start, background, behaviour problems and language development at age 3 years
- 12000 - 43 000 children in MoBa-study
- No association between type of child care and behaviour problems at age 3 years
- No association with age at start of centered care
- Positive effect on language development
- Difference USA - Norge due to child care policies

Synnve Schjølberg
Early start detrimental to child mental health?
Sibling design: Jaffe et al., 2011

- USA, 9000 children, representative
- Start non-parental care at age 1, 2, 3 years
- Follow up at age 4-13 years
- Outcome 1: Behaviour problems, ADHD-symptoms, oppositional behaviour
  - 5-7 years
  - 11-13 years
- Outcome 2: Academic competence: Math, reading
  - 5-7 years
  - 11-13 years
- Controlled for in addition to common sibling background:
  - Child temper before age 12 months
  - Birth weight
  - Sibling birth order
  - Mother’s intelligence
  - Mother’s age at first delivery
  - Mother’s marital status
  - Family income
”Based on our comparison of children who initiated nonmaternal care at various points across the first 3 years with their siblings who did not, we conclude that the timing of entry into nonmaternal care has neither positive nor negative effects on children’s development. Characteristics of families who choose to enroll their children into nonmaternal care play a greater role in influencing children’s outcome than the timing of children’s entry into nonmaternal care in the first three years.”

Resultat

• Different age between siblings at start of non-parental care has no association with differences in academic skills and behaviour later in life

• Good control of selection effects accounts for all effects of time point for start of non-parental child care outside home

• If there are such effects before age three years, they must be very small and not consistent across time

• Support conclusions from Lekhal et al., Norway
  • Jaffe, van Hulle & Rodgers, 2011
Detrimental with long centre days?
Zachrisson et al., Child behavior, 2013c

• Mother’s report at age 18 and 36 months on short:
  • Child Behavior Check List (eksternalising)
  • Attention problem scale
  • Aggressive behavior scale
  • Family and prenatal risk factors
  • Sibling comparisons among 17,000 children
• Number of hours spent in child care centre <40 h has little effect on problem behaviour
• Difference in problem behaviour between 100 % home care and > child care centre very small
• Small increase in problem behaviour at > 40 h
• Little practical implication on macro level because < 4 % stay that long time in kindergarten
• Interaction effects between child characteristics and child care centre qualities?
• Area of future research

- UK, 3000+ children, representative
- 141 child care centres
- 6 types of child care centres + home care
- Outcome at age 11 years
- Age 3 years at start
- ECERS-R: Preschool quality, subscales 1-7:
  - Localities/equipment, care routines, cognition, interaction, program structure, parents, personnel
- ECERS-E: Preschool quality – 1-7 on cognitive curriculum:
  - Reading, math, science, environment, diversity
Assessment at 3 and 11 years of age
Sylva et al., 2011

- Cognition: English and math
  - National Assessment Test (BAS 3 y)
- Social comp and behav (SDQ) (ASBI 3 y)
  - Self regulation
  - Positive social behaviour
  - Hyperactivity
  - Anti-social behaviour
- Home Learning Environment (HLE), 3-4+ y
  - Reading
  - Painting/drawing
  - Library visits
  - Play/numbers/form
  - Alphabet/letters
  - Songs/children’s rime
Sylva et al., 2011

• First study to combine assessment of quality of both home learning and preschool learning environment
• Both environments may work
• High home quality for children who do not attend preschool promotes self regulation (SDQ)
• High preschool quality for children with weak learning environment at home promotes self regulation (SDQ)
• Each may compensate for the other
• Both have have langterm effects up to age 11 years
• Child care centre quality influences both cognitive and social development at 11 years
• Low quality child care centres give fewer longterm effects on cognitive and social development age 11 y.
• Medium and high child care quality gives far greater yields than does weak child care quality
• Take home: Betydelig forebedring av læringsmiljøet til førskolebarn, særlig for dem som kommer fra vanskelige levekår vil gi dem sterk posisjon ved skolestart og ha langtids effekt.
Hvem har godt av barnehage?
Pianta et al., Psychological Science, 2009

- Alle barn har godt av høykvalitetsbarnehager
- Påstander om at bare gutter/jenter, noen etniske grupper, bare fattige, finner ikke støtte i forskningslitteraturen
- Barn fra familier med lav utdanning/inntekt har størst effekt
- Men barn fra familier med høy utdanning/inntekt har effekt tilsvarende 75% av barn fra lavinntektsfamilier
- Mindre velstående lærer mer når de går sammen med mer velstående
- Og får bedre kammerateffekt når de skoles med barn fra høykvalitetsbarnehage
- Tradisjonelle barnehager har mye svakere kort- og langtidseffekt enn pedagogisk fokuserte programmer og høykvalitets førskoleprogrammer – fra null til 1 standardavvik i forskjell (prestasjonsgap for fattige barn)
- Null evidens for at gjennomsnittlige barnehageprogrammer gir effekt på samme nivå som de beste programmene.
Kostnad-nytte
Pianta et al., Psychological Science, 2009

• Perry preschool, Chicago CPC
  – Deltids og kun 2 år før skolestart
• Abecederian program
  – Full tid, helårs, fra første leveår
  – Jobb for foreldrene mulig
• Alle: Nytte overgår kostnad med betydelig margin
• Førskoleprogammer er fornuftig offentlig investering:
  – Mindre fremtidige skolekostnader
    • Mindre spesialundervisning og mindre om igjen
  – Økte foreldreinntekter
  – Mindre kriminalitet/delinquency
  – Mindre risikoadferd (Abecedarian)
    • Ubeskyttet sex, tobakksrøyking: (lavere fremtidige helsekostnader)
  – Økte langtidsinntekter for mødre (Abecedarian)
• Abecedarian betaler seg selv via mors økte inntekt
Hvor viktige er langtidseffektene
Pianta et al., Psychological Science, 2009

• Vanlig: 10-20 % av forskjell i skoleprestasjon
• Mer intensive og varige programmer: Mye sterkere effekter
• Svært kostnadseffektivt:
  – USA: mest kostnadsintensive programmene av topp kvalitet fra 3 år: + 300 000 USD (ca 2 mill Nkr) per barn
• Billigere programmer (CPC; pre-K)
  – + 90 000 USD per barn
• Estimert økonomisk verdi av virkingen på barna kan være betydelig smlgn med kostnadene, men avhengig av kvaliteten på programmet
• Overført til Norge: 300 000 barn x 1 mill kr = 3 00 mrd 😊
• Den økonomiske fordelen for foreldrene kommer i tillegg
Oppsummert velkontrollerte studier
Pianta et al., Psychological Science, 2009

• Ingen effekt av tidspunkt for barnehagestart
• Ingen negativ effekt av mengde barnehageeksponering
• Varig positive virkninger på kognitiv og sosial utvikling replisert i en rekke land
• Økonomisk lønnsomt:
  – Skoleprestasjoner
  – Mindre spesialundervisning
  – Høyere utdanning
  – Høyere familieinntekt
  – Bedre sosial/emosjonell/adferdsutv.
  – Lavere kriminalitet/deliquency (USA)
• Mulige negative effekter ikke latt seg replisere i eksperimentelle studier
Centred child care = Universal promotion

- Strengthens cogn, soc, emotional dev.
- Enhances school achievements
- Best effect on disadvantaged children
- Good effect also on advantaged children
- Compensates difficult periods in life
- Reduces social inequality in health
- Solid documented long term effects (11-13 år alder)
- May be into adult life (education, employment)
- Very profitable to society economy
- Age at start up (1,2,3 years) not significant
- Quality is all that counts to achieve positive effects

- Jaffe et al., 2011; Sylva et al., 2011; FHI, 2011; Havnes & Mogstad, 2010; Pianta, 2009
• Barnegruppens sammensetning
• Gruppestørrelser
• Voksen-barn ratio
• Personellkvalifikasjoner
• Tjenester til barn og familie
• Dagslengde
• Konsept, pedagogikk, program

• Lønn
• Utviklingsmuligheter
  • Ledelse
  • Menn
• Minioritetsanatte
  Systematisk observasjon
• Personal-feedback
  – F. eks. Marte Meo
Hva er kvalitet? Prosessuelle kvalitet

• Barns direkte opplevelse med folk/gjenstander
• Måten pedagoger gjør ting på
• Kvalitet i samhandlingen mellom/med barn/foreldre
• Tilgang på aktiviteter
• Dynamisk, avhengig av det enkelte barns behov
• Nære prosesser viktigst

Sterk satsing på å øke kvaliteten i barnehagene

- Psykisk helsemåling
  - Barnehage – ikke førskole
- Kvalitet før kapasitet/fleksibilitet
  - Ikke flere opptak i året med mindre det brukes like mye på å øke kvaliteten (1,4 mrk)
- Kvalitetsindikatorer
  - Lær av Sverige
  - Offentliggjør resultatene
- 70% pedagogdekkning
  - Lær av Estland
- Helsestasjon i barnehagen
- Uavhengige kontrollsystemer (jfr. Barnehagemeldingen)
My Child Care Centre

1. Minst 1 voksen/3 barn under 3 år
2. Minst 1 voksen/6 barn over 3 år
3. Maximum åtte barn per «gruppe»
4. Minst ett års barnefaglig utdanning på alle ansatte
5. Minst tre års ped/barnefaglig utdanning på mer enn halvparten av ansatte (alle ledere/avd.ledere).
6. Lav turnover
7. Lenger åpningstid enn ansattes arbeidstid med kompensert voksentetthet
Min barnehage - fortsatt

8. Klart pedagogisk-idemessig konsept
9. God tilgang på aktiviteter
10. Trivelig utemiljø
11. Helsestasjon i barnehagen
12. Kokk
13. Profilerende tilleggstjenester, f. eks. skiskole, tegnetrening, musikkgruppe
14. Minst 30% mannlige ansatte
14. Offentliggjorte psykisk helseindikatorer
15. Regelmessig foreldretilbakemelding basert på systematisk observasjon av følelsesregulering, tekning, språk, motorikk og sosial adferd
16. Personalveiledning (Eks.: Marte Meo)
17. PPT, skolehelsetjeneste, kommunepsykologtjeneste
18. Karriereutvikling for ansatte
Do child care centers prevent anxiety, depression and behavior problems?

We do not know yet. But we did not know when we invested in employment for all, healthy dieting, exercise, high tax on tobacco and alcohol, roundabouts in road crosses, concrete road division, fluor tooth paste, and laying infants on their back, that it would result in reduced: infant mortality, coronary heart mortality, stroke mortality, cancers mortality, traffic deaths, healthier teeth, increased longevity of life.
The barriers to health child development
The Sector Challenge

Feelings/anxiety/depression=health=Ministry of Health
Tinkning/langage/learning=education=Ministry of Education
Behaviour/drugs/parents=family/environment=Ministry of Family etc

Tinkning? Ped service!
Bullied? Ministry of Edu!
Child care service? Ministry of child!
Behavior problems? Child&family directorate!
Kindergarten? Education dir
Afraid? Child psychiatry!
In Norway, kindergartens are education institutions – not health services

Kristin Halvorsen, Minister of education, Norway
In Norway, kindergartens are education institutions – not health services

In Estonia, kindergartens are education institutions – not health services

Kristin Halvorsen, Minister of education, Norway

Hannu Pevkur, Minister of Social Affairs, Estonia
• Children as becoming
• Children as being
We spend too much money on mental illness in all the wrong places
I go for high quality child centers for all preschool children in Norway – by 2017. And, I will set up a research group to monitor the long term mental health effects to Norway.

Jonas Gahr Støre
Minister of Health
Norway
I go for high quality child centers for all preschool children in Estonia – by 2017. And, I will set up a research group to monitor the long term mental health effects to Estonia.

Hannu Pevkur, Minister of Social Affairs, Estonia
I go for high quality child centers for all preschool children in Hungary – by 2017. And, I will set up a research group to monitor the long term mental health effects to Hungary.

Miklós Szócska, Minister of Health, Hungary
Svein (56), on disability award since 42
Hedda-Pernille Sørensen
8 years of age - ADHD
Just like Christmas Eve! Yeeeeeeah!
It’s soooo healthy!

Child care centers!

And it pays off!
They could have helped us at the child care center!

Do you really believe that?
Children – our most important resource

Arne Holte
Professor dr. philos.
Assisterende direktør
Nasjonalt folkehelseinstitutt

3rd Nordic Family Center Conference
Providing family support through interprofessional collaboration
Rica Hotel Tromsø