Prevention and Promotion in Mental Health
Progress, Practices and Challenges

Prof. dr. Clemens Hosman
Radboud University Nijmegen and Maastricht University

Dr. Gerard Molleman
Manager Epidemiology and Public Health
Nijmegen Public Health Institute

The Netherlands
Major themes

- Mental health and behavioral disorders: important target for prevention and public health
- Prevention and health promotion: How is it organized in the Netherlands?
- Practice of prevention in mental health: new challenges
- Quality management and evidence: collaboration between policy, practice and science
- Effects of preventive programs and MHP
Youth mental health and behavioral disorders: important target for prevention and public health
In Europe ± 1 out of 7 adults suffer from a mental disorder in a given year.

Recent European estimations point at 41 million suffering from anxiety disorders, 21 million from affective disorders, and almost 10 million from addictive disorders.

Many children are exposed to the burden of parental mental illness.
Why priority for prevention in mental health?

- Epidemic size of mental health disorders (15-20%)
- Further increase of prevalence expected
- Serious impact on individual and social life
- 40 to 50% don’t get professional treatment
- Risk factor for serious physical diseases
- Economic costs of mental illness are large
- Good mental health has many individual, social, economic benefits
- Society in general becomes more prevention-focused
- Effective prevention programs are available
Costs in early adulthood from childhood conduct disorder

Costs (£) from ages 10 to 28

Source: Scott, Knapp, Henderson, Maughan, BMJ 2001
Mental Health

Related to many social problems

Mental Health
Mental Disorders

 Represents Social and Economic Capital
Mental health and prevention of mental-behav disorders = cornerstone of human, social and economic capital

Prevention and promotion are wise investments while …

Good mental health contributes to:

- higher quality of life
- better health and less mortality
- better school achievements and less school drop out
- higher productivity at work
- more safe communities and less violence
- significant cost reductions social security and justice
Prevention and Promotion in Mental Health……

…. an idea advocated for over more then 100 years

*Prevent incidence of mental disorders?*

Main reactions in the past:

- Wishful thinking !
- Poorly defined field
- Difficult to understand how to prevent
- No scientific knowledge on causes
- We do not know if it works

Last 25 years    major progress made
2010:  Times have changed significantly....
Last 25 years major progress made

... Insight in epidemic proportions of mental illness
... Enough knowledge on causes to start acting in prevention
... Wide range of prevention programs available
... Many studies showing evidence on positive outcomes
... Programs become disseminated and implemented
Functionally Related Fields of Public Health

**Prevention**
- mental and behavioral disorders
- poor mental health

**Mental Health**

**Mental Health Promotion**
- strengths & resilience

© Hosman Nijmegen Prevention Research Centre
Subdivision of primary prevention: reducing incidence of mental disorders

targeted at three levels of risk

- Universal prevention: Whole population
- Selective prevention: Populations at increased risk
- Indicated prevention: Individuals + symptoms no disorder
Subdivision of primary prevention: reducing incidence of depression

Examples

Adolescents with depressive symptoms: Coping with depression course

Children of depressed parents: Support groups adolescents Mother-baby intervention

Whole school Coping skills

Indicated prevention

Selective prevention

Universal prevention
Disorder-specific prevention

Broad spectrum prevention

Child abuse
Domestic violence

Risik factors

Factor 1
Factor 2
Factor 3
Factor 4

depression

depression
substance use
agression
suicide

intervention
intervention
intervention
intervention

intervention
Mental Health

Emotional intelligence
Positive affectivity
Positive self esteem
Feelings of mastery
Optimism
Self management
Stress management
Problem solving
Creativity
Decision making
Literacy
Communication
Social competence
Social values & respect

What is Mental Health?

A cluster of mental and social capacities that people need

to enhance their well-being,
to develop themselves mentally and physically,
to create satisfying and respectful social and intimate relationships,
To work productively and fruitfully
to cope with the adversities and changes in life, and
to reduce risk of serious problems and illness
Many countries begin to change from a dominating care-focused mental health system towards more balance between care and prevention & promotion.
Prevention and health promotion: How is it organized in the Netherlands?

Nationally and Locally

Dr. Gerard Molleman
Practice of prevention in mental health
Mental Health Promotion and Prevention in the Netherlands

History
Organization
Themes
Approaches
Prevention in mental health in the Netherlands

- Started in 1970
- Prevention departments of mental health centers
- Increasing pressure for quality
- From trial-and-error to evidence-based programs
- From small to larger departments
Domains of MH prevention

1. Prevention departments of mental health centers – selective and indicated prevention

2. Wider group of organizations and professionals explicitly targeted at prevention and promotion in mental health

3. Organisations, professionals, community leaders and volunteers who’s work has beneficial impact at determinants of mental health

All are essential
Mental Health Promotion and Prevention in the Netherlands

Well-developed National Infrastructure for Prevention and Health Promotion

*mental health as a priority area*

Implementation by many organizations at the local level

- Primary health care
- Prevention and Health Promotion Teams
  - Addiction clinics
  - Community mental health centres
  - Parent education services
- Public health services
- Custody services
- Schools & companies

National institutes and NGOs
Organization of prevention in the Netherlands

50 community mental health centers

Each center has a prevention team

Task: Development and implementation of programs to prevent serious mental illness

Programs

- Children of mentally ill parents
- Parent education & child abuse
- Depression & Anxiety
- Stress at work
- Chronic disorders & family
- Mental health in elderly

© Van Doesum & Hosman Prevention Research Centre Nijmegen University, 2000
A lot achieved in 40 years......

Nation-wide professionele MH-prevention sector
Trained prevention experts (± 400)
collaborating with many other professionals

Large scientific knowledge base
Focus at quality management and science-base

Broad spectrum of prevention products
Evidence-based programs + research projects

National support systems and collaboration

Links practice – policy – research centres
International collaboration
Organizational context had large impact on development and identity of MH-prevention

Development from mental health centers - Implications?

- Strong expertise in MH and psychiatry disorder prevention
- Person and family focused
- Care-related prevention
- Indicated and selective prevention
- Product-targeted culture
- Methods – courses, training, education, home visits
Mental disorders / problems
- depression and anxiety
- behavioral problems and bullying
- eating disorders
- psychosis
- suicide

Mental health
- resilience and problem solving
- social competence (school)
- stress management
- mental capital

Populations at risk
- COPMI: transmission parents, family members, unemployed, migrants

Social determinants
- domestic violence
- bullying
- parenting competence
- social support and social isolation

Identity field of MH-prevention

International and
Partly national
On all these topics
Evidence of significant effects of prevention programs

Hosman PRC Nijmegen Maastricht 2010
Important trends and innovations

Two Tracks
(1) prevention + care (stepped care)
(2) public health + health promotion

Strategic
Strong increase of E-prevention - internet
More community approach
Collaboration with primary care and social systems
From ‘interventions’ to integral approach
- Address Clusters of related problems
- Early life focus

Organisation
Merging of organizations and larger scales
Integration Mental health and addiction
Intersectorial coordianation
Two-Track Policy

*Prevention part of stepped care*

*health promotion and prevention integrated in communities*

Hosman PRC Nijmegen Maastricht 2010
‘Stepped Care’ in prevention by outpatient clinics

- Large-scale Public Mental Health Education
  universal and selective prevention through media & materials

- Short interventions for groups at risk
  selective prevention

- Intensive prevention programs
  indicated prevention for those at high risk

- Early detection & treatment
  secondary prevention

For example:

Parenting problems
Use of Alcohol and drugs
Comprehensive Multi-component approach in prevention for children of mentally ill parents in The Netherlands

Play-talk groups
Information
Support groups
Brochures and video’s
Early treatment
Foster homes
Buddy system

Additional support persons
Family organizations
School mental health education
Mass media approach

Internet KOPPstoring (E-health)

Early treatment
Mother-Baby intervention
Parent training
Psycho-educ family program
Support Groups
Brochures/Videos

Postgraduate training
Education
Screening
Protocol&training
Case-management
Consultation
Conferences

Child
Parents
Network
Professionals

Community

Policy, Advocacy, Budgeting
Important trends and innovations

Two Tracks
(1) prevention + care (stepped care)
(2) public health + health promotion

Strategic
Strong increase of E-prevention - internet
More community approach
Collaboration with primary care and social systems
From ‘interventions’ to integral approach
- Address Clusters of related problems
- Early life focus

Organisation
Merging of organizations and larger scales
Integration Mental health and addiction
Intersectorial coordination
Wat is het
Leven met plezier, de toekomst positief en met zelfvertrouwen tegemoet zien. Soms vat dat niet mee, zeker niet voor mensen die zich somber voelen. Wat hulp is dan meer dan welkom. De internetcursus ‘Kleur je Leven’ biedt die hulp. De cursus bestaat uit 8 lessen en 1 opfrisles na 12 weken. Deelname aan de cursus is gratis. Lees verder

Voor wie
De cursus is voor volwassenen die individueel hun sombere gevoelens of depressieve klachten willen aanpakken. Cursisten hebben hiervoor een computer met een internetverbinding en een geluidskaart nodig en een e-mailadres. Lees verder

Aanmelden

Een medewerker van de Rivierduinen kijkt op basis van uw aanmelding of de cursus geschikt voor u is. Binnen 5 werkdagen krijgt u hierover bericht. Lees verder
Challenges

Increasing reach
Link physical, mental and social health
More impact on environment
To comprehensive approaches
More evaluation and monitoring
Cost effectiveness
Stronger public health impact

Hosman PRC Nijmegen Maastricht 2010
Finding and Common Preventive Approach
‘smart clusters’ of related problems

- Stress
- Exercise
- Immune system
- Nutrician
- Alcohol smoking

Depression

(Illuminate) Overweight
Diabetes
Cardiovascular diseases

URBAN40 studie: Invloed wijkkenmerken
Many effective prevention programs available

Access to effective programs through dozens of national and international databases

Mental health; Social Emotional Learning; Suicide; Violence & Delinquency; substance Family & Parenting; School-based programs

Europe     http://database.imhpa.net
Netherlands http://www.nji.nl
Quality management and evidence: collaboration between policy, practice and science

Dr. Gerard Molleman
Effects of prevention and mental health promotion
What can we conclude about the effectiveness of prevention programmes in the mental health sector?
Conclusions from outcome research

- Many preventive interventions available
- Can be effective and cost-effective
- Diversity of preventive outcomes
- Long term effects possible (15 years)
Effectiveness

Overwhelming evidence that we can improve resilience and reduce risk factors and problems behaviors through preventive interventions in children, adolescents, adults.

Beginning evidence that we can reduce/delay incidence of some mental and behavioral disorders (e.g. depression, anxiety, externalising problems, suicide).

Several studies: long term preventive effects (6 – 25 yrs).

Prevention programs in mental health show a broad spectrum of health, social and economic benefits.
What can we do to enhance a healthy start of life?

Effective approaches during pregnancy and infancy to prevent child abuse and extreme stress and to enhance resilience in children

Home visiting during pregnancy

Early Parent Education and Support

Supporting parents with psychiatric problems

(interaction, stimulation, health behaviour)
adolescent, low income pregnant women

Home-visitation by nurses pregnancy ► 24 months

• healthy life style
• parent education
• problem solving
• social support
• linkage to social network
  + health / social services

Outcomes first 2 years

Reduced smoking pregnancy

75% less preterm low birth weight

In high risk mothers

child abuse 19% → 4%

32% fewer emergency-room visits

Reduced use of welfare
Outcomes 3rd and 4th year

- 40% less visits to physicians for injury and ingestion
- Higher IQ score child
- 80% more involvement in work force (mothers)

Benefit: $ 3.313 per family

Long term outcomes at age 15

- Less abuse and maltreatment
- 56% less likely alcohol and drugs problems
- 56% fewer arrests
- 81% fewer convictions
- 63% reduction in sexual partners
**School-based programmes**

Repeated evidence for a broad range of positive outcomes

- **Increase**
  - competence and resilience
  - social and coping skills
  - self esteem
  - prosocial behavior
  - anger control
  - school achievement

- **Decrease of**
  - problem behavior
  - aggression
  - youth delinquency
  - smoking
  - substance use
  - depressive symptoms
  - anxiety
School Children (7-14 yrs) with anxiety symptoms but no disorder

Cognitive – behavioral and family-based group intervention

10 weeks

Prevention Anxiety Disorders

Dadds, Spence et al., Australia

% onset anxiety disorders in 6 months

Control group

Prevention group

54%

16%
Children of Divorce: Mother and Child Prevention Program
Sandler, Wolchik et al. (2002)

Mother groups
And child groups
11 group sessions
2 individual sessions
Children: 8-12 year

Quality M - C relation
Involving fathers
Conflicts parents
Discipline
Effective coping
Divorce stressors

Presence of mental disorders
6 years after intervention
+ less externalizing problems

RCT, n = 218
Matthew Sanders, University of Queensland
Professor of Clinical Psychology

Positive Parenting Program

Disseminated and Implemented across 17 Countries
| **Goal**        | Promoting Positive Parenting  
|                | Preventing behavioural & emotional Problems |
| **Approach**   | Public health approach: population wide  
|                | Parents with children: pregnancy to 14 yrs |
| **Risk level**| Universal → selective → indicated |
| **Methods**    | TV, books, lectures, groups, phone, individual |
| **Settings**   | Media, (pre)school, primary health care, mental health services, workplace |
| **Themes**     | Safe, positive environment; assertive discipline; realistic expectations; problem solving .......... |
| **Features**   | Comprehensive, low access, minimal sufficiency |
Levels of Intervention

Universal Triple P
Level One

Selected Triple P
Level Two

Primary Care Triple P
Level three

Standard Triple P
Level four

Enhanced Triple P
Level five

Targets

universal
all parents

selected
parents and children with minor problems

indicated
parents and children detectable problems

secondary
over 40 controlled trials across different cultures

**PARENTS**

- Disfunctional parenting strategies (e.g. coercive)
- Stress and Anger
- Depression
- Well-being
- Parent’s relationship quality

**CHILDREN**

- Conduct problems
- Child abuse

Small to large effect sizes, sustainable → 1 year follow up

e.g. see meta-analyses by Novak & Heinrichs (2008), Graaf et al. (2008)
US Triple P System Population Trial
Prinz, Sanders, Shapiro et al. (2009)

Effects in number of cases per 1000 children aged 0 to 8 years

Substantiated child maltreatment cases

Pre     Post
Tripp P  Control
P<.0.03

Out-of-home placements

Pre     Post
Tripp P  Control
P<.0.01

Roughly 1 in 4 prevented

Also injuries significant reduced
social and economic benefits

- youth delinquency ↓
- violence ↓
- loss productivity ↓
- cost welfare ↓
- low income ↓
- school achievement ↑
- social participation ↑
Can we prevent onset of mental disorders?

Universal, selective and indicated prevention programs have repeatedly shown to reduce or prevent high levels of anxiety, depressive and externalising symptoms. ➔ more well-being and less risk

Meta-analysis (Cuijpers et al., 2008) across 19 RCT’s on selective and indicated interventions aiming to prevent onset of depressive episodes, found in average a reduction of 22% in the incidence of depression.

Preventing eating disorders? Long history of unsuccessful programs. After more than 20 years and 60 controlled trial we can now conclude from multiple trials (Stice et al., 2006) that it is possible to reduce incidence. For example: Student Bodies Program (internet-program) for high risk women: no onset in 2 years ➔ 12% in control group.
Growing Number of Effective Programs,

Nevertheless ..........

Also many programs in practice

- no information on outcomes
- not effective or only moderately
- work only for part of participants
- only short time effects
- very limited reach in community

Need to invest in program improvement and evaluation research
Could we always trust that our prevention or promotion programs will be effective?

The answer is: **NO**!

Llopis & Hosman 2003
Nijmegen Meta-analysis Study

Effects of 146 programs evaluated in controlled studies

Effect Size: Small to Moderate
ES range: [-0.52 to 3.98]
Mean ES = 0.35 / WES = 0.26
Some recommendations for the Future

To increase population impact of primary prevention:

- Make systematically use of successful programs and replicate outcome studies
- Make primary prevention an integral part of primary health care & mental health care through a stepped care strategy
- Make “prevention and promotion in mental health” an integral part of mainstream public health and health promotion
- Explore the opportunities for “win-win” strategies by linking primary prevention with social policies and human rights
- Systematic capacity building for primary prevention and mental health promotion across professions, communities and public sectors
Effective programs

New challenges
Promising developments and challenges

- Interventions much earlier in life addressing early risk and protective factors
- Addressing clusters of related problems
- Community programmes & strategies: e.g. Communities that care
- Increasing reach: Making successfully use of internet (E-health) and self-help guides
- Community monitoring systems for prevention
- Linking prevention and promotion with social policy, human rights and social justice
The social Web of Depression
relation between mental and social problems

Calls for a comprehensive approach
Public health + Mental health + Social Policy

Depression
en Anxiety

Stress management
Work and disability
Poverty
Refugee status
Children of mentally ill
Teenage parenthood
Chronic illnesses
Violence to

Nijmegen Prevention Research Centre 2004
Challenges for prevention mental disorders
optional priority issues for WHO-CC

1. Strengthen epidemiological base of prevention
2. Link prevention with mental health promotion
3. Integrate prevention of mental disorders in public health, health promotion and social policies
4. Develop expertise, policy models & tools for local management of integrated prevention approaches
5. Develop intervention methods with large reach
6. Focus on prioritized prevention / MHP themes
   Healthy start of life; school-based programs; work & economy
7. Invest in build professional capacity across organizations and settings
8. Enhance dissemination of knowledge & programs
1. Widen the Spectrum of Outcomes by Combining Prevention and Mental Health Promotion Approaches
2. Develop a standardized system of outcomes and indicators
3. Increase Reach and Impact in Society
e.g. internet, public policies, legislation, dissemination
4. Address and Understand Clusters of Related Problems and Develop a Coalition with Health Promotion
5. Study Impact of Social Determinants on Individual Risk and Protective factors (life span) and Opportunities for Change
e.g. relate with social policies, human rights
6. Mental Health Monitoring & MH Impact Assessment
7. Economic Evaluation of Mental Health, Prevention, Promotion
8. Building Local & State Infrastructures for Implementation
Trend: *multicomponent packages*

Examples:

- **Triple P:** multi-level Positive Parenting Program
- **Communities that Care:** Youth Externaling
- **Multicomponent, multi year school programs**
- **Stepped Care:** Depression Prevention
Innovative developments
Where to find solutions for current limitations

Use new methods to improve reach in population

- Make more use of internet and mass media
- Stepped Preventive Care strategy with low-budget and easily accessible methods for the groups with the lowest risk / need.
- Use community approaches, and influence those who have some control over social risk factors that impact many people.
Options for Innovation
Where to find solutions for current limitations

Increase efficiency and effectiveness of programs

- More focus on **common factors** with a long term broad spectrum impact, e.g. child abuse, poor parenting, social-emotional skills...

- Do not solve each problem separately, address **clusters of narrowly related problems**. Try to understand and use their interrelations
E-health - Internet prevention

- Fast growing availability of internet-based prevention and treatment programs
- Higher accessibility among youngsters
- Evidence of effectiveness
- Cost-effective and larger reach
Evidence-based practice, as common in medical practice, is also becoming the standard in prevention and health promotion worldwide.

Evidence-based means,

1. policies and practices are based on epidemiological knowledge and research of risk and protective factors
2. interventions could provide solid evidence that they are effective and cost-effective.
To evaluate outcomes of preventive programs we need to apply multiple evaluation criteria

1. **Effectiveness**
   - Effective? No effect? Negative effects?
   - Strength of the effect
   - Duration: sustainable effects?
   - Reach: For which part of target population?

2. **Quality of Evidence** How biased are conclusions?

3. **Relevance** Value for each involved party?
Why are evaluation and ‘evidence-based’ practices in prevention so important?

- Crucial feedback for improving prevention programs and stop programs that don’t work
- Selection: which programs work best?
- Efficiency: use of scarce resources for prevention
- Accountability: to justify use of public money
- To get community support and participation
- To get funding for prevention practices
- Professional quality: Effectiveness is essential
How to create a productive link between science, policy and practice?

- Our experiences at national and local level
- National level
  - Setting priorities
  - research and development program: knowledge, programs and implementation
  - Databases
  - Money for implementing prevention practice only for intervention programs with evidence-based effects or based on evidence-based principles
How to create a productive link between science, policy and practice?

- Local level
Trends and challenges
Building a System of Conditions for Effective Prevention & Promotion in Mental Health
Standards of evidence database
Treatment Gap
Western Europe

- Major depression: 45.4%
- Alcohol dependence: 92.4%
- Psychosis: 17.8%
- Bipolar disorder: 39.9%
- Panic disorder: 47.2%
- Anxiety disorder: 62.3%

Kohn 2004
E-health and prevention

- Cursus of e-mailcoaching via internet:
  - www.alcoholondercontrole.nl
  - www.boulimiadebaas.nl
  - www.cannabisondercontrole.nl
  - www.drugsondercontrole.nl
  - www.eetbuienondercontrole.nl
  - www.familievan.nl
  - www.gokkenondercontrole.nl
  - www.gripopjedip.nl
  - www.internetondercontrole.nl
  - www.kleurjeleven.nl
  - www.rokenondercontrole.nl

- Behandeling via internet is mogelijk via www.interapy.nl.

- Daarnaast bieden verschillende GGZ-instellingen die participeren in Indigo ook online behandelaanbod, zoals:
  - www.mijnparnassia.nl
Cursussen Parnassia

- Assertiviteit
- Stoppen met piekeren en negatief denken
- In de put, uit de put
- Somber of gespannen
- Omgaan met stress
- Meer zelfvertrouwen
- Liever bewegen dan moe
- Bewegen geeft kracht (voor migrante mannen)
- Hellup, mijn kind kan niet zonder
- Mijn kind, alcohol en drugs
- Chronisch zieken
- Ondersteuningsgroep nabestaanden na zelfdoding

Terug naar het overzicht
Parnassia

- Preventie: Stress
- Preventie: Depressie
- Preventie: Alcohol, drugs en gokken
- Preventie: Kinderen van patiënten

Terug naar het overzicht
Developments

- focussing on prioritized issues
Which parties are involved in prevention and mental health promotion?
Generating resources and capacity for prevention and health promotion

- Integrating prevention in the professional activities of existing services
- Experts
Support Coalition for Prevention
KOP
Challenges
Effectiveness of prevention
Support of National Institutes to local prevention practices

- Factsheets and databases with supporting information: epidemiological data on major problems, risk factors
- Standardization
- Providing models for local prevention planning
Final conclusions

- Prevention is highly needed: Given the high prevalence of mental disorders, their huge social and economic costs, and lack of treatment capacity.

- Preventive interventions generate a wide range of significant effects, also social + economic benefits.

- Share knowledge on successful and unsuccessful preventive practices, and learn to understand the principles of effective prevention.

- Collaboration between research-practice-policy to implement and adapt interventions that work, to develop new programs, and improve effectiveness.
Division of tasks in prevention and
Concepts of mental health

- documents EU en WHO
- mental health and mental disorders
- mental health and addiction
- categorical versus dimensional view
- attention to subclinical ‘disorders’
- clusters of related problems
The mental health of the European population is a resource for the attainment of some of the EU’s strategic policy objectives, such as to put Europe back on the path to long-term prosperity, to sustain Europe’s commitment to solidarity and social justice, and to bring tangible practical benefits to the quality of life for European citizens.

Mental health of the EU population can be considerably improved:

• Mental ill health affects every fourth citizen and can lead to suicide, a cause of too many deaths;

• Mental ill health causes significant losses and burdens to the economic, social, educational as well as criminal and justice systems;
Mental health, mental ill health and its determinants:
The WHO describes mental health as: “a state of well-being in which
the individual realizes his or her abilities, can cope with the normal
stresses of life, can work productively and fruitfully, and is able to make
a contribution to his or her community”2.

Mental ill health includes mental health problems and strain, impaired
functioning associated with distress, symptoms, and diagnosable
mental disorders, such as schizophrenia and depression.

The mental condition of people is determined by a multiplicity of
factors (annex 1), including biological (e.g., genetics, gender),
individual (e.g., personal experiences), family and social (e.g., social
support) and economic and environmental (e.g., social status and living
conditions).
Major strategies for capacity building and expertise development

1. Training & Learning systems
2. Involving new personnel, disciplines and stakeholder organizations
3. Setting professional standards across disciplines for providing MHP/prevention
4. Coalition building & Advocacy: national & local