Transgenerational mental health

Opportunities to prevent transmission of psychiatric problems to next generations

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Transgenerational mental health: our common concern
Transgenerational Mental Health

**Concerns** the transmission of neurobiological, cognitive & social-emotional abilities & vulnerabilities from parents to children, including the stigma and transmission of psychiatric and related problems, generation after generation.

**Science** and **Practice** of *transgenerational mental health*:

1. epidemiology and impact of parental MI on children, families and society,
2. biological, psychological and social determinants and mechanisms of transmission,
3. development of effective policies & practices that
   - enhance a family approach in dealing with mental illness
   - prevent transgenerational transmission of mental illness
   - promote transgenerational transmission of mental health and resilience
Improving the lives of
Children of Parents with Mental Illness COPMI
Families affected by Parental Mental Illness FaPMI

Worldwide attention

History  Micheal Rutter 1966; 1984

International Prato Research Collaborative:
  sharing knowledge, practices, tools & policies
  Innovative solutions, common Research & Development partnerships
  Advocacy and consultation to countries


Worldwide basic research:  Developmental psychopathology, Epigenetics, Neurobiology, Nursing ......
Articles in 72 peer-reviewed international scientific journals
International Prato Research Collaborative on Families affected by Parental Mental Illness

Adult Psychiatry
Child Psychiatry
Psychology
Education
Social Work
Midwifery
Nursing
Health Research
Public Health
Rural Health
General Practice
Paternal Postpartum Depression

Sahiba Bhat & Shama Ali-Monan

While postpartum depression (PPD) has historically been studied primarily with mothers, recently there has been increased awareness of the experiences of fathers regarding this issue. Paternal Postpartum Depression (PPD) is a relatively understudied and unrecognized condition that can affect fathers. This article aims to bring attention to this issue and to explore the factors contributing to its occurrence and the implications for the health and well-being of fathers and their families.

Prevalence of Paternal Postpartum Depression

Studies suggest that fathers are at risk for depression, and the prevalence of paternal PPD varies from 2 to 3% in some studies. Fathers are also at risk for anxiety disorders, and it is estimated that 5% of fathers may experience anxiety symptoms.

Symptoms of Paternal Postpartum Depression

Symptoms of paternal PPD can include feelings of sadness, irritability, fatigue, difficulty concentrating, and decreased interest in activities. These symptoms can persist for an extended period after the birth of the child.

Significance

Understanding paternal PPD is crucial as it can have significant implications for the family unit. Early recognition and intervention can help prevent long-term negative outcomes for both the father and the family.
Children / Families of Parents with Mental Illness or Addiction
a serious public health concern

- At high risk of psychiatric problems
  - Between 3 to 13 times higher risk
  - One of the main sources of new psychiatric disorders
  - Transmission generation after generation

- Risk at a broad spectrum of negative health, mental health and social outcomes in children, adolescents and adults

- Large group in society: one in 3 to 4 children*

- One in three mental patients is a parent (children < 18 yrs)

- Offspring shows high demand for professional care (5x)

- High social and economic cost

* Netherlands: concerns around 577,000 children Estimated for Switzerland around 300,000 COPMI)
Could we reduce the ever ongoing transmission of psychiatric disorders and related problems from generation to generation?

Among our clients? In the population?

What do we need?

Awareness & support

Knowledge

Theory

Interventions & tools

Evidence on effects & impact

The ‘Conditions’ to make it happen
What is the impact of parental mental illness on children? What problems do they experience?

Parenting & family impact:
- Poorer parental care
- Attachment problems
- Child abuse and neglect
- Family conflict & divorce
- Violence between parents

Physical impact:
- Birth complications
- HPA-axis, cortisol reactivity
- Weakened immune system
- Poorer infant growth
- Chronic diseases

Vulnerability and Resilience:
- Difficult temperament
- High stress reactivity
- Negative affectivity
- Less emotional resilience
- Negative self-concept
- Poor social competence

Psychiatric outcomes:
- Early behavioral problems
- Depressed and anxious
- Psychiatric disorders
- Substance abuse
- Suicidal behavior

Subjective experiences:
- Not informed, no communication about illness of their parents
- Ashamed and feeling guilty
- Responsibility & Parentification “no childhood”, becoming ‘Young carers’.

Social consequences:
- Lower family income
- Stigma & social isolation
- Avoid disclosure, help seeking
- School Problems & Bullying
- Lower academic achievement

Research outcomes show higher risk of:
- Stigma
- Social isolation
- Avoidance of disclosure and help seeking
- School problems & bullying
- Lower academic achievement
- Weakened immune system
- Poorer infant growth
- Chronic diseases
- Early behavioral problems
- Depressed and anxious
- Psychiatric disorders
- Substance abuse
- Suicidal behavior
- Not informed, no communication about illness of their parents
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- Lower academic achievement
Not all children-COPMI show negative outcomes or are at high risk of psychiatric problems

role of protective factors

1. Parents and families have also capacities and strengths to:
   - reduce negative impact of parental mental illness
   - provide sufficient parental care, warmth, safety
   - use parenting role to create identity, structure and meaning in life

2. Part of the children show large resilience
   - Gene-based resilience and positive temperament
   - Emotional and social `competence

3. Social network provide practical and emotional support

Talk with children and families — Assess their risk factors and also strengths
Not all children in families with parental mental illness are at high risk

Focus preventive interventions at children and families who are at high risk:
- Very young children (prenatal > 5 yrs)
- Highly distressed pregnant mothers
- Chronic or multiple parental mental disorders
- Both parents have a mental illness
- High conflict families; abuse & neglect
- Families with parental suicide
- Families living in poverty
- Refugee or war families
- Accumulation of risk factors (‘cumulative risk’)
“It's the number of risk and protective factors that counts”

**Epad Study (UK)**

*Early Prediction of Adolescent Depression*

Collishaw et al. 2016. *Lancet Psychiatry*

Adolescent offspring of parents with recurrent depression

N=262

Prospective study: 4 years

3 assessments

Age at start: 9 – 17 yrs

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**Proportion of healthy adolescents free of mild or severe mental health problems in 4-year period**

- Number of protective factors *

* parental positive emotion, co-parent support, good quality-social relationships, self-efficacy, frequent exercise
“It's the number of risk and protective factors that counts”

Pittsburgh Girls Study
Van der Molen et al. 2012
J. of Abnormal Child Psychology

Longitudinal study
N = 2034 (7 – 12 yrs)

Risk of Child Disruptive Behavior Disorder

Maternal risk factors:
- e.g. psychopathology
- single mother
- prenatal substance use
- poor neighborhood
- poor parenting

Maternal promotive factors:
- e.g. low depression
- maternal warmth
- consistent discipline

Graphs showing:
- Number of maternal risk factors
- Percentage child disruptive behavior disorder
- Number of maternal promotive factors
- Percentage child disruptive behavior disorder
30 years of research on transgenerational mental health issues

- epidemiology
- risk factors
- neurobiology
- epigenetics
- resilience
- development
- Families
- parenting
- interventions
- prevention
- economic

large body of jigsaw pieces of knowledge across 72 scientific peer-reviewed journals
Prevention aims to influence causal factors in development of illnesses, health and well-being

1. What are the major causal factors and mechanisms in transmission of psychiatric problems from parents to children?

2. Could we describe it in a transparent, useful theoretical model to integrate our scattered knowledge: Knowledge map
   → to serve as Road & Planning Map for improving the lives of families and prevent psychiatric and related problems in the children?
What type of theoretical framework do we need?

Transmission mechanisms

Risk and Protective factors

Dynamic & Socio-ecological
Parent – Child – Family – Network – Community

Developmental: pregnancy to adulthood

Stress – coping – support

Practical
What are the major mechanisms of transgenerational transmission of psychiatric problems?

- Genetic and epigenetic transmission of risk / resilience
- Prenatal biology: Pregnancy stress impact the brain
- Parent-child interaction
- Family processes and conditions
- Social system impact: stressors, opportunities, support (e.g. social network, schools, health care, community)

Interactions between mechanisms
Gene-environment (epigenetics)
Sociopsychoneurological processes
Could we influence these major mechanisms of transgenerational transmission

- Genetic and epigenetic transmission of risk
- Prenatal biology: Pregnancy stress impact the brain
- Parent-child interaction
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Family-based treatment of parental disorders & child disorders

Preventive interventions specifically developed for COPMI- FaPMI

Preventive interventions that influence common factors of multiple problems

Universal interventions: parenting education and social-emotional development

YES
Crisis Theory for Prevention
Gerald Caplan, Child Psychiatrist and Pioneer of Preventive Psychiatry (1964)
From analysis to action

From science to practice

Significant reduction of mental health burden and onset of new psychiatric disorders in the population of children in families living with parental mental illness.
What are our strategic opportunities?

Clinical perspective
improving the options to prevent transgenerational transmission of mental disorders within client contacts with parents, children and families in health and mental health care

Public health perspective
improving mental health in the population of children and families living with parental mental illness or at high risk
Our strategic options are defined by:

- Intervention in which stage of development and transgenerational transmission?
- How define the COPMI – FaPMI target group
- Focus on which risk or protective factors
- From which health sector or public sector?
- Clinical perspective (clients) or a public health perspective
Among all these groups are parents having children.
Multiple Target Groups in Transgenerational Mental Health

Which professionals and organizations are involved?

Parents
- Chronic patients
- Parental Mental disorder
- Distress, subclinical symptoms
- Parents at high risk
- All parents

Family
- Child-Adolescent mental disorder
- Distress, emotional symptoms
- Behavioral problems
- COPMI at high risk
- COPMI
- Vulnerable children
- All children

Children
- All children

Preconception
- Adult psychiatrists
- Psychotherapists
- Clinical social work
- Psychiatric nurses

Prenatal
- Primary Health Care
- Perinatal care
- GPs
- Nurses
- Midwives
- Social services

Postpartum-Infancy
- Public health
- (pre-)Schools, media
- NGO’s, Family org.
- Policy-makers

Childhood
- GPs
- Nurses
- Midwives
- Social services

Adolescence
- Public health
- (pre-)Schools, media
- NGO’s, Family org.
- Policy-makers

Adulthood
- Policy-makers
“Treatment of parents will result in reducing and preventing psychopathology in their children”

**true or false?**

**What is the evidence?**

Less depression in mothers after psychotherapy ➔ improved mother-child interaction and better child mental health.

Significant but small effect sizes (g = 0.35 to 0.40)

Some evidence that successful treatment with antidepressives results in less depressive and disruptive child behavior disorders.

**Meta-analyses**

Cuijpers et al. 2015
Seven RCT studies

Gunlicks & Weissman 2008
10 studies

**Controlled studies**

Weissman et al. 2006 (CS)
Polwski et al. (2008)
Treatment of parents will result in reducing and preventing psychopathology in their children

Some comments

Positive effect on children, but small: Valuable, not sufficient.

Timing treatment: impact of parental disorder in pregnancy or early life could be structural

Treatment Gap: still large number of untreated cases

In treatment Parent role mostly not discussed, neither implications for children
What else could you do in mental health care to support the prevention of transgenerational transmission?

1. Check always if clients are parents; child clients are from FaPMI
2. Use a family approach
3. Listen to stories of parents and children
   Offer information about parental illness
4. Assess risk profile and identify strengths: tailored support
5. Make use of Evidence-based preventive interventions
6. Capacity building of primary care and public health on COPMI-FaPMI
Multiple evidence-based preventive interventions for COPMI - FaPMI to adopt, provide, refer to

<table>
<thead>
<tr>
<th>Parent/Family</th>
<th>1. Let’s Talk about Children; Child Talks</th>
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<tr>
<td></td>
<td>2. Family Talk intervention (6-8 sessions) *; Family Group CBT Preventive Program</td>
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<td></td>
<td>3. Effective Family Program (comprehensive + Professionals Training) *</td>
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<td></td>
<td>4. Family Options Program; Preventive Basic Care Management</td>
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<td>5. Online parent and family support*, Family Focus DVD</td>
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<tr>
<th>Child/Mother</th>
<th>6. Parent-Baby Intervention (video-home-training) *</th>
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<td>7. Squeeze the Mouse (4-8 yr + parents)</td>
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<td>8. Play &amp; Support group programs (8-12 yr)</td>
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<th>Adolescent</th>
<th>9. CBT Prevention of Depression Program</th>
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<td>10. Psychoeducative support groups *</td>
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<td></td>
<td>11. COPMI online programs *</td>
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<td></td>
<td>12. Online Survivalkid (16-24 yr)</td>
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*currently implemented in different countries (e.g. Family Talk Program in 10 countries)
## Effective?
### Examples of evidence-based effects (RCTs)

**Parent-baby intervention**  (Karin van Doesum et al.)
- Home visiting program prevents insecure attachment at 5 yrs: less externalising problems (high stress group)

**Let’s Talk**  (Tytti Solantaus et al.)
- Talking with parents: 30% reduction child emotional symptoms
- Socio-ecological approach: 61% drop in registered child protection cases

**CBT Depression prevention Adolescents**  (Weersing, Beardslee)
- Timing: Only when parent has no acute episode
- Drop of 34% (22%) incidence depression

**Meta-analysis Siegentaler et al 2012**  49% Overall reduction in outcome indicators  (ES= -22)
Use from the wide range of effective prevention programs in child and youth mental health

- Prenatal interventions
- Parenting education
- Child abuse prevention
- Social-Emotional Learning (Pre-school, school-based)
- Depression and anxiety prevention
- Psychosis prevention
- Eating disorder prevention
- Internet prevention programs

Access through national databases effective programs
Major limitations

Available Preventive interventions:
- Limited use and implementation rate
- Small reach and impact in risk populations
- Need increase in effect level
- Single interventions insufficient

Solutions
- Increase knowledge on programs, lower resistance
- Public health approach
- Combine interventions ➔ Collective impact
- Improve structural conditions for implementation
What are our strategic opportunities?

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improving the options to prevent transgenerational transmission of mental disorders within client contacts with parents, children and families in health and mental health care.

**Public health perspective**

improving mental health in the population of children and families living with parental mental illness or at high risk.

Integrate COPMI prevention in primary health care, schools, communities.

E-mental health (internet).

Integrate in local policies.
Prevention of postnatal depression

N = 2241 pregnant women or young mothers < 6 weeks
Cluster randomization across 101 primary care practices

Brugha et al., 2010
**WazzUp Mama**

**Distressed Pregnant Women by midwives**

**Mother-oriented Program web-based tailored**
- Personalized information
- Screening tests
- Personalized advice

**Midwives**
- Format for supporting women: self-disclosure / -management
- Guidelines for consultation referral and implementation
- Regional health care map
- Formats meetings and consultation

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**Graphs showing the effect of Wazzup Mama on distressed pregnant women.**

1. **% very distressed women**
   - Control vs. Wazzup Mama
   - Pre-test vs. Post-test

2. **% depressed women**
   - Control vs. Wazzup Mama
   - Pretest vs. Posttest

3. **% anxious women**
   - Control vs. Wazzup Mama
   - Pretest vs. Posttest

4. **% pregnancy-related anxiety**
   - Control vs. Wazzup Mama
   - Pretest vs. Posttest

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*Fontein-Kuipers et al. 2015*
*Research Centre Midwivery Science & CAPHRI Maastricht University NL*
Family Nurse Partnership
David Olds  USA

Outcomes first 2 years
Reduced smoking pregnancy
75% less preterm
In high risk mothers
child abuse 19% → 4%
32% fewer emergency visits
Reduced use of welfare

Long term outcomes at age 15
Less abuse and maltreatment
56% less likely alcohol-drugs
56% fewer arrests
81% fewer convictions
Increased school education

Economic evaluation: Benefit to cost ratio: 2.73. Net benefit $17,000 per family
Family stress and functioning

The other parent

Strengths and weaknesses

Onset, duration, severity

Parental disorder

Vulnerability, resilience of child

Risk & protective factors

Parent-child interaction & parenting

Pregnancy risk factors

Genetic & biological transfer

Social network

Healthy development

Temporary problems

Mental disorders

Chronic Stress

Coping

Coping with divorce

Social network, neighbours, school...

Resilient-vulnerable

Parents

Social environment

Child

Theory-based options for Transgenerational Prevention

Prevention of parental / postnatal depression / anxiety and other mental disorders

Reduce severity & duration parental illness by treatment

Increase strengths by MHP

COPMI-focused: ‘Child Talk’, ‘Family Talk’, Effective Family Program, Preventive case management, Internet parenting support

More MHP – prevention:

Parenting education

Nurse-Family Partnership

Stress management

Safe families

Early cognitive stimulation

Social-emotional Learning (schools)

Lifespan development

Indicated prevention

Depression

Anxiety

Eating disorders

Psychosis

Mass media

Family organizations

COPMI-focused: Play and Talk groups

Support groups

Internet support

Genetic & biological transfer

Pregnancy risk factors

Play and Talk groups

Support groups

Internet support

Let’s talk

Mother-baby program

Theory-based options for Transgenerational Prevention
From isolated activities to a integrated multicomponent approach of health and social problems to generate ‘Collective impact’

Isolated preventive activities
Isolated outcomes

Individual professionals, teams and organisations working independently, activities are not attuned and coördinated, therefore have limited impact

Collective, multicomponent integrated approach

→ Collective impact
Collective impact is the public effect resulting from a combination of interventions, programs and measures, provided from multiple organisations, services and sectors.
To achieve a Public Mental Health effect: What ‘conditions’ do we need to make it happen?

Risk & strengths assessment
Community support
Preventive interventions
Early detection & Family Talk
Treatment: Family, parent, child
Large scale implementation + reach

Theory
Research
Knowledge
Interventions
Public support
Policy
Champions
Management
Leadership
Collaboration
Coördination
Coalitions
Multiple providers Organisation
Professional Capacity Expertise
Financing system
Public Impact
on transgenerational mental health & illness

Hosman 2016
To conclude

Supporting these children and families is urgently needed. We have knowledge and tools to make a change.

Reflect on what you could contribute to prevent transgenerational transmission of mental illness and improve their mental health.

At home, sit together with your colleagues and discuss what you could do together to improve support for these families.

Talk with primary health care, local organizations and policymakers to see what you could create much better collective impact.

Make a local plan for improving the conditions to make it happen.
Thank you

.... and Talk with the Children
Thank You

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