# NUDZ NÁRODNÍ ÚSTAV DUŠEVNÍHO ZDRAVÍ

Developing mental health care for pregnant and postpartum women

MUDr. Antonín Šebela, Ph.D., Center for Perinatal Mental Health



## **Disclosure of information on conflicts of interest**

### **Grant/research support:**

the topic of perinatal mental health currently one grant project - ESF OPE+; + 4 grants in past

Honoraria for lectures with content control from the fee provider: NO

**Consultant/advisory board member of a company with a potential conflict of interest:** NO

Participation in research directly sponsored by companies with potential conflicts of interest: NO

Shareholder/owner/co-owner/management member in a company with a potential conflict of interest: NO

**Other potential conflicts of interest:** NO

Woman 30 years old, in a happy relationship with her husband for more than 10 years Two children 2 years; 2 months

Already during pregnancy she shows signs of the presence of symptoms of mental disorderMassive deterioration with the development of (very suspicious) postpartum depression with psychotic symptoms (by her behaviour - brushing her teeth with fluoride toothpaste, she destroyed her older daughter's brain and thus damaged her for life, by breastfeeding her second daughter for only one day, she also destroyed her brain, she stopped her development).

Somatic checks of children, all right repeatedly.

A woman ends her life and the lives of her children by jumping into the abyss. She couldn't live with the guilt, and she didn't want her beloved husband to suffer because of it, because he would have to take care of two children (disabled because of her).... They were healthy.

The woman had more than 20 contacts with health care providers during pregnancy, childbirth, and postpartum. NO ONE asked how she was feeling or recommended a psychiatric evaluation.



J Clin Med. 2023 Feb; 12(3): 1120. Published online 2023 Jan 31. doi: 10.3390/jcm12031120

Maternal Mental Health Care Matters: The Impact of Prenatal Depressive and Anxious Symptoms on Child Emotional and Behavioural Trajectories in the French EDEN Cohort

Kadri-Ann Kallas,<sup>1</sup> Ketevan Marr,<sup>1</sup> Simi Moirangthem,<sup>1</sup> Barbara Heude,<sup>2</sup> Muriel Koehl,<sup>3</sup> Judith van der Waerden,<sup>1,\*</sup> and Naomi Downes1

Mauro Giovanni Carta, Academic Editor

Author information 
Article notes 
Copyright and License information 
<u>PMC Disclaimer</u>

1,135 mother-child pairs, women with symptoms of depression and anxiety in pregnancy. Cohort A treated, **Cohort B untreated** 

Children of mothers who were not treated during pregnancy (psychology/psychiatry) had a higher lifetime risk for:

Hyperactivity and inattention (OR = 2.06, 95% CI 1.33 - 3.20) Conduct disorder (OR = 2.26, 95% CI 1.44 - 3.56) Emotional problems (OR = 2.32, 95% CI 1.50 - 3.58)

PMCID: PMC9917852 PMID: 36769767

### JDZ NÁRODNÍ ÚSTAV DUŠEVNÍHO ZDRAVÍ NU



Centre for Mental Health F ECONOMICS AND POLITICAL SCIENCE

MATERNAL MENTAL HEALTH everyone's business



## Impacts of a depressive episode

### On the course of pregnancy

riziko předčasného porodu před dokončeným 37. gestačním týdnem (Grigoriadis et al., 2013)

risk of preterm birth before the 37th gestational week (Grigoriadis et al.. 2013)

risk of spontaneous abortic

reduced adherence of won

On the child negatively affects the mate 2002)

# In the last decade, suicide has been the leading cause of maternal mortality - about 20% of postpartum deaths

Khalifeh et al., (2016)

disruption of the child's early emotional attachment is one cause of higher rates of psychopathology and delayed cognitive development in children of mothers with postpartum depression compared to children of non-depressed mothers (Sanger et al., 2015)

## On lactation/breastfeeding

associated with shorter breastfeeding duration and early cessation of breastfeeding (Dias et al., 2015)

### Relationships

Impaired quality of life and partner relationships (Dagher et al., 2021)

(Righetti Velterema et al.,



# Are PMDs a common issue in our country?

More than 10% of women can be diagnosed with a mental disorder at the end of week six postpartum.

Mental disorder	Prevalence (%)	Conversion to Czech Republic 113 000 births /year	
Postpartum psychosis	0,4	452	
Schizophrenia / bipolar disorder	0,8	904	
Severe depression	2,5	2 825	
Anxiety disorders	12,3	13 899	
Any mental disorder (not all potentioal dis. observed)	13,6	15 368	

## Přesnost Edinburské škály poporodní deprese ve screeningu těžké depresivní poruchy a dalších psychických poruch u žen ke konci šestinedělí

Accuracy of the Edinburgh Postnatal Depression Scale in screening for major depressive disorder and other psychiatric disorders in women towards the end of their puerperium

<sup>1</sup>Národní ústav duševního zdraví, Klecany
 <sup>2</sup>Katedra psychologie, Filozofická fakulta, UK, Praha
 <sup>3</sup>Klinika psychiatrie a lékařské psychologie 3. LF UK a NÚDZ, Praha
 <sup>4</sup>Porodnicko-gynekologická klinika LF UP a FN Olomouc
 <sup>5</sup>Gynekologicko-porodnická klinika 1. LF UK a FN Bulovka, Praha

Souhrn: Cíl: Zhodnotit přesnost Edinburské škály poporodní deprese (EPDS) ve screeningu těžké deprese a jiných duševních poruch u žen v šestinedělí. Soubor a metodika: U 243 žen jsme administrovali EPDS k hodnocení depresivních příznaků a Mini-mezinárodní neuropsychiatrické interview k určení psychiatrických diagnóz. Určili jsme frekvenci výskytu sledovaných psychických poruch v souboru a vyhodnotili jsme senzitivitu, specificitu a další diagnostické proměnné pro přítomnost těžké deprese a jiných duševních poruch pro různé prahové skóry v EPDS. Výsledky: Těžká depresivní porucha se vyskytovala u 2,5 % (95% IS 1,1–5,3 %) žen. Jakákoli sledovaná duševní porucha pak u 13,6 % (95% IS 9,8–18,5 %) žen. Nejlepšího poměru senzitivity a specificity pro záchyt těžké depresivní poruchy dosahoval prahový skór EPDS ≥ 11; senzitivita: 83 % (95% IS 35–99 %); specificita: 79 % (95% IS 74–84 %). EPDS skór ≥ 11 pak dosahoval senzitivitu 76 % (95% IS 58–89%) a specificitu 82 % (95% IS 76–87%) pro záchyt jakékoli sledované duševní poruchy. Závěr: Česká verze EPDS má dobrou vnitřní konzistenci a EPDS skóre ≥ 11 dosahuje nejlepší kombinace hodnot senzitivity a specificity pro detekci těžké depresivní poruchy. Screening pomocí EPDS u žen na konci šestinedělí může odhalit i jiné psychické poruchy než pouze těžké deprese. Klíčová slova: Edinburská škála poporodní deprese – screening – perinatální duševní zdraví – šestinedělí – poporodní deprese

### A. Horáková<sup>1,2</sup>, E. Nosková<sup>1,3</sup>, P. Švancer<sup>1,3</sup>, V. Marciánová<sup>4</sup>, P. Koliba<sup>5</sup>, A. Šebela<sup>1,3</sup>



**Birth rate in the Czech Republic** 

In 2023, 91.1 thousand children were born alive, 10.2 thousand fewer than a year earlier. This was the second significant year-on-year decline in the number of births in a row.

The decline in births was also associated with a decrease in the total fertility rate to **1.45 children per** woman. The average age of women at the birth of their first child has increased by 0.8 years to 28.9 years over the last ten years.

The average age of women at the birth 30.4 years

**GROUP WORK AND DISCUSSION:** 

What is the trend in your country?

Is a woman's increasing age at childbirth and fewer children per family in any way risky? Or is it a benefit? Why do you think this is happening?

# **Up to 75%** of women with mental health problems in the Czech Republic on maternity and parental leave **do not seek professional help**

Archives of Women's Mental Health https://doi.org/10.1007/s00737-020-01052-w

SHORT COMMUNICATION



### Prevalence of mental disorders and treatment gap among Czech women during paid maternity or parental leave

A. Sebela<sup>1</sup> · N. Byatt<sup>2</sup> · T. Formanek<sup>3</sup> · P. Winkler<sup>3</sup>

D 🗕 NÁRODNÍ ÚSTAV

Received: 25 August 2019 / Accepted: 16 July 2020 © Springer-Verlag GmbH Austria, part of Springer Nature 2020

### Abstract

We performed a secondary analysis of the data from Czech epidemiological study on mental health to determine the prevalence of mental disorders among Czech women on maternity or parental leave and to assess the present treatment gap. Any mental disorder was present in 17.6% (n = 21) of the total sample of 119 women. The treatment gap was present among 76% (n = 16) of them. In conclusion, most women on maternity or parental leave facing a mental disorder were not receiving treatment. The present study is the first of its kind in the region of Central and Eastern Europe.

Keywords Mental disorders · Maternity leave · Parental leave · Treatment gap · Stigmatization



## Parental leave in the Czech Republic

Parental leave in the Czech Republic is used to deepen childcare.

up to three years; "salary" - 13 841 EUR total; covered by social insurance

both mother and father can go but we have a minimum of fathers going on parental leave

## **GROUP WORK AND DISCUSSION:**

what's the parental leave situation like in your state? what are the advantages and disadvantages of parental leave?



## Summary

- Mental disorders in the perinatal period are relatively common in the Czech Republic
- Untreated mental disorders have serious effects on pregnancy, childbirth, breastfeeding and the newborn
- A high percentage of women in our country are untreated
- There has been no systematic treatment in the Czech Republic

# the Czech Republic childbirth, breastfeeding and the







Home / Publications / Overview / WHO guide for integration of perinatal mental health in maternal and child health services

### WHO guide for integration of perinatal mental health in maternal and child health services

19 September 2022 | Publication



### Overview

Supporting good mental health can improve health outcomes, and the quality of maternal and child health services for all women can be improved by creating an environment where they feel safe to discuss any difficulties they are experiencing in a respectful and caring environment that is free from stigmatization.

The guide for integration of perinatal mental health in maternal and child health services outlines an evidence-informed approach describing how program managers, health service administrators and policy-makers responsible of planning and managing maternal and child health services can develop and sustain high-quality, integrated mental health services for women during the perinatal period. It brings together the best available evidence to support maternal and child health providers in promoting good mental health, identifying symptoms of mental health problems and responding in a way that is adapted to their local and cultural context.

Data ~

About WHO ~

WHO TEAM Mental Health and Substance Use

EDITORS

World Health Organization

NUMBER OF PAGES

66

### REFERENCE NUMBERS

ISBN: 978-92-4-005714-2

COPYRIGHT (c)(i)(s)(0)



Author Manuscrip

Obstet Gynecol. Author manuscript; available in PMC 2018 Apr 19. Published in final edited form as: Obstet Gynecol. 2016 May; 127(5): 911-915. doi: 10.1097/AOG.00000000001395

## Perinatal Obstetric Office Depression Screening and Treatment: Implementation in a Health Care System

Tracy Flanagan, MD<sup>a</sup> and Lyndsay A. Avalos, PhD, MPH<sup>b</sup>

Author information 
 Copyright and License information 
 <u>PMC Disclaimer</u>

### **Gynaecology clinics and hospitals in California under the Mind:Pregnancy programme**

Three-point screening: "the first prenatal visit (or early pregnancy), 2) 24–28 week "glucola visit", and 3) the 3–8 week postpartum visit"

Effective, accepted by both ob-gyn and patients, linked to other care

PMCID: PMC5907799 NIHMSID: NIHMS954842 PMID: 27054937



Geburtshilfe Frauenheilkd





<u>Geburtshilfe Frauenheilkd.</u> 2022 Oct; 82(10): 1082–1092. Published online 2022 Sep 30. doi: <u>10.1055/a-1844-9246</u>

# Implementing a Perinatal Depression Screening in Clinical Routine: Exploring the Patient's Perspective

Thuy Giang Trinh, Cornelia E. Schwarze, Mitho Müller, Maren Goetz, Kathrin Hassdenteufel, Markus Wallwiener, and Stephanie Wallwiener

Gynaecological outpatient clinics in Baden-Württemberg and the University Hospitals Heidelberg and Tübingen within the Mind:Pregnancy programme

Effective, accepted by both ob-gyn and patients, linked to other care

PMCID: PMC9525145 PMID: <u>36186149</u>

Language: English | German





▶ World Psychiatry. 2020 Sep 15;19(3):313–327. doi: <u>10.1002/wps.20769</u> 🗹

### Perinatal mental health: a review of progress and challenges

Louise M Howard<sup>1</sup>, Hind Khalifeh<sup>1</sup>

Author information > Article notes > Copyright and License information

PMCID: PMC7491613 PMID: 32931106

We conclude with research and clinical implications, which, we argue, highlight the need for an extension of generic psychiatric services to include preconception care, and further investment into public health interventions, in addition to perinatal mental health services, potentially for women and men, to reduce maternal and child morbidity and mortality.



**GROUP WORK AND DISCUSSION:** 

What do you think may be the difficulties/stressors for women and their families during pregnancy and after childbirth?

Do you think they are the same across Europe?

Are there any specific, more vulnerable groups?



> Front Psychiatry. 2024 Mar 13:15:1350036. doi: 10.3389/fpsyt.2024.1350036. eCollection 2024.

# State of perinatal mental health care in the WHO region of Europe: a scoping review

Anna Horakova <sup>1</sup><sup>2</sup>, Hana Nemcova <sup>1</sup><sup>3</sup>, Kristyna Hrdlickova <sup>1</sup><sup>3</sup>, Stefani Kalli <sup>2</sup>, Alina Davletova <sup>2</sup>, Mario Filipe Rodrigues Saraiva Duarte <sup>4</sup>, Darya Molodina <sup>4</sup>, Tiina Riekki <sup>5</sup>, Antonin Sebela <sup>1</sup><sup>4</sup>

Affiliations + expand

PMID: 38544852 PMCID: PMC10965802 DOI: 10.3389/fpsyt.2024.1350036

### 2.5 Synthesis of results

The synthesis of the results of the online resources search was carried out for each country using the following scoring system; a country could score between 0 and 5 points, with one point awarded for each if: 1) there is a general national mental health policy; 2) there is a specific national PMH policy; 3) implemented PMH screening service is present (nationally or in more than half of the country's population); 4) it provides any evidence-based treatment option for PMH difficulties (nationally or in more than half of the country's population); 5) there are any evidence-based guidelines for PMH care (for diagnostics, prevention, treatment, screening or pharmacotherapy for any type of PMH problem).

Countries were ranked according to the number of points they scored. Further, we identified the WHO European leaders in PMH care and countries that lack this specialised care.

	Inclusion criteria	Exclusion criteria		
Population	Perinatal (from the beginning of pregnancy to one year postpartum) women and their families	Women and their families outside the perinatal period		
Study design	National and regional (affecting more than half of the country's population) policy/guideline/ strategy documents	-Regional (affecting less than half of the country's population) policy/ guidelines/strategy documents -Research studies -Comments		
Setting	Countries of the WHO European region	Other countries than members of the WHO European region		
Languages	anguages -Czech, English, Slovak, Russian, – Portuguese, Spanish, French, Greek fluently -Searches in other languages were performed using an online translator			
Year	The document was published between 2004 and 2023	-		
Search period	16/05/2022	25/09/2023		

-, not applicable.



### Figure 1



Figure 1 The status of perinatal mental health in the WHO-European region. The status was assessed based on a point system ranging from 0 to 5 for each country. The allocation of points reflects the level of development in perinatal mental health care, with a higher score indicating more advanced and comprehensive care.



# **Czech Republic**

Innovations in care are in national strategy documents :

National Action Plan for Mental Health; The Concept of Mother and Child Care.

core elements - screening and delivery of appropriate support and care modalities

**GROUP WORK AND DISCUSSION:** 

What is the situation in your country?

## Our innovation programmes

**EEA and Norway Grants:** Pregnancy without psychosocial stress - the earliest prevention of mental disorders and toxic stress in children. 2021 - 2023 ClinicalTrials.gov Identifier: NCT04853693

**AZVJ:** Effectiveness of distant peer support in preventing postpartum depression: a randomized controlled trial. 2021-2024 ClinicalTrials.gov Identifier: NCT04639752

**ESF+** Incubation phase of solution development early screening for psychosocial risk and delivery of appropriate intervention. . 2023-2/2024







## Financováno **Evropskou unií**



## Screening and follow-up care scheme





# **Evidence - Pregnancy**

20 outpatient clinics

Praha, Středočeský a Olomoucký Kraj

Decrease in anxiety and psychosocial stress

Randomized Controlled Trial > Midwifery. 2024 Dec:139:104198. doi: 10.1016/j.midw.2024.104198. Epub 2024 Sep 24.

## Effectiveness of the mom supports mom peer support intervention in treating antenatal mental health difficulties in women

Anna Horakova<sup>1</sup>, Marie Kuklova<sup>2</sup>, Kristyna Hrdlickova<sup>3</sup>, Hana Nemcova<sup>4</sup>, Pavel Knytl<sup>5</sup>, Lenka Kostylkova<sup>6</sup>, Antonin Sebela<sup>7</sup>

Affiliations + expand PMID: 39342905 DOI: 10.1016/j.midw.2024.104198

Findings: A total of 167 women were included in the study and randomized into two groups. Depressive symptoms did not decrease (Cohen's d; 95 % CI = 0.48; 0.17-0.79; p = .002), but levels of anxiety (Cohen's d; 95 % CI = 0.44; 0.13-0.75; p = .005) and psychosocial stress (Cohen's d; 95 % CI = 0.55; 0.20-0.82; p = .002) were reduced in women in the intervention group compared with women in the control. In addition, prenatal attachment increased among intervened women (Cohen's d; 95 % CI = 0.48; 0.17-0.79; p = .002).



## Evidence - postpartum

6 maternity hospitals

Baseline 2-3 days postpartum Outcome week 6 postpartum

Praha, Středočeský a Olomoucký Kraj

EPDS 10 a více 22%

Sebela et al., 2024 under review







## DUŠEVNÍ POHODA MÁMY JE DŮLEŽITÁ

Pro vás, pro miminko i pro nás

Nejčastější mateřské psychické obtíže:

úzkost

vtíravé myšlenky

ztráta radosti

vyčerpanost

pochyby

Součástí naší péče je proto on-line screening psychosociálního stresu po porodu.



🗢 úsměv mámy





# Outcomes (week six postpartum)

	Control group (N=315)	Intervention group (N= 173)	р	t	Cohen´s d (95% Cl)	F (Adjusted age, baseline score)	Р
Self-assesment scales	ì		-				
ΔEPDS	-4.9 (5.4)	-6.5 (5.7)	.003	t= 2.971; df=486	0.30 (0.10;0.48)	F(1;484)= 4.979	.026
ΔPASS	-6.8 (10.6)	-9.8 (10.3)	.003	t= 2.990; df=486	0.29 (0.10;0.47)	F(1;484)= 6.177	.013
ΔAQoL ment	0.06 (0.15)	0.09 (0.15)	.015	t= -2,442; df=486	0.20 (0.01;0.39)	F(1;484)= 5.450	.02
ΔAQoL pshysic	0.12 (0.17)	0.17 (0.20)	.002	t= 3.081; df=486	0.28 (0.09;0.46)	F(1;484)= 10.261	.001
AQOL utility	0.07 (0.15)	0.11 (0.15)	.008	t= -2.682; df=486	0.27 (0.08;0.45)	F(1;484)= 7.072	0.008

- EPDS Edinburgh pospartum depression scale
- PASS Perinaral anxiety screening scale
- AQoL Quality of life



## How are we doing with the implementation of screening?

36 maternity hospitals across Czechia

Baseline 2-3 days postpartum Follow-up day 14 Next follow ups: voluntary every month until the child is 1 year old

currently about 1300 screenings per month

Regular work with maternity hospital staff

Educational programme for midwives - "Midwife with special competence in perinatal mental health,,

## **GROUP WORK AND DISCUSSION:**

What competencies in promoting psychosocial health do midwives in your country have?

https://forms.nudz.cz/fill/public/7ZeL6xeHBpC9AvLij3sw



## **GROUP WORK AND DISCUSSION:**

Is there a similar program in your state? Do you have any experience with it?

Could you find any gaps in our solution?

Is a focus on mental health alone sufficient?

What do you think are the pros and cons of peer support?



## Further development - What we learned through HCD methods

Our solution is not sufficient to cover all possibilities Ux redesign for both gyn-por and users, but also for the whole service Need to involve multiple organisations in the solution - within the support provided (after screening and initial triage)









Operační program Zaměstnanost plus

## 🗢 úsměv mámy



Společnost pro ranou péči



## Target health or social service



HWST

NU<sup>D</sup>Z národní ústav duševního zdraví







## **GROUP WORK AND DISCUSSION:**

What about the integration of mental health and social services in your state?