MENTAL HEALTH OF WOMEN WHO ARE PREGNANT OR CARING FOR INFANTS

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EARLY OBSERVATIONS

Traité de la folie des femmes enceintes, des nouvelles accouchées et des nourrices

Treatise on insanity in pregnant, newly delivered and lactating women

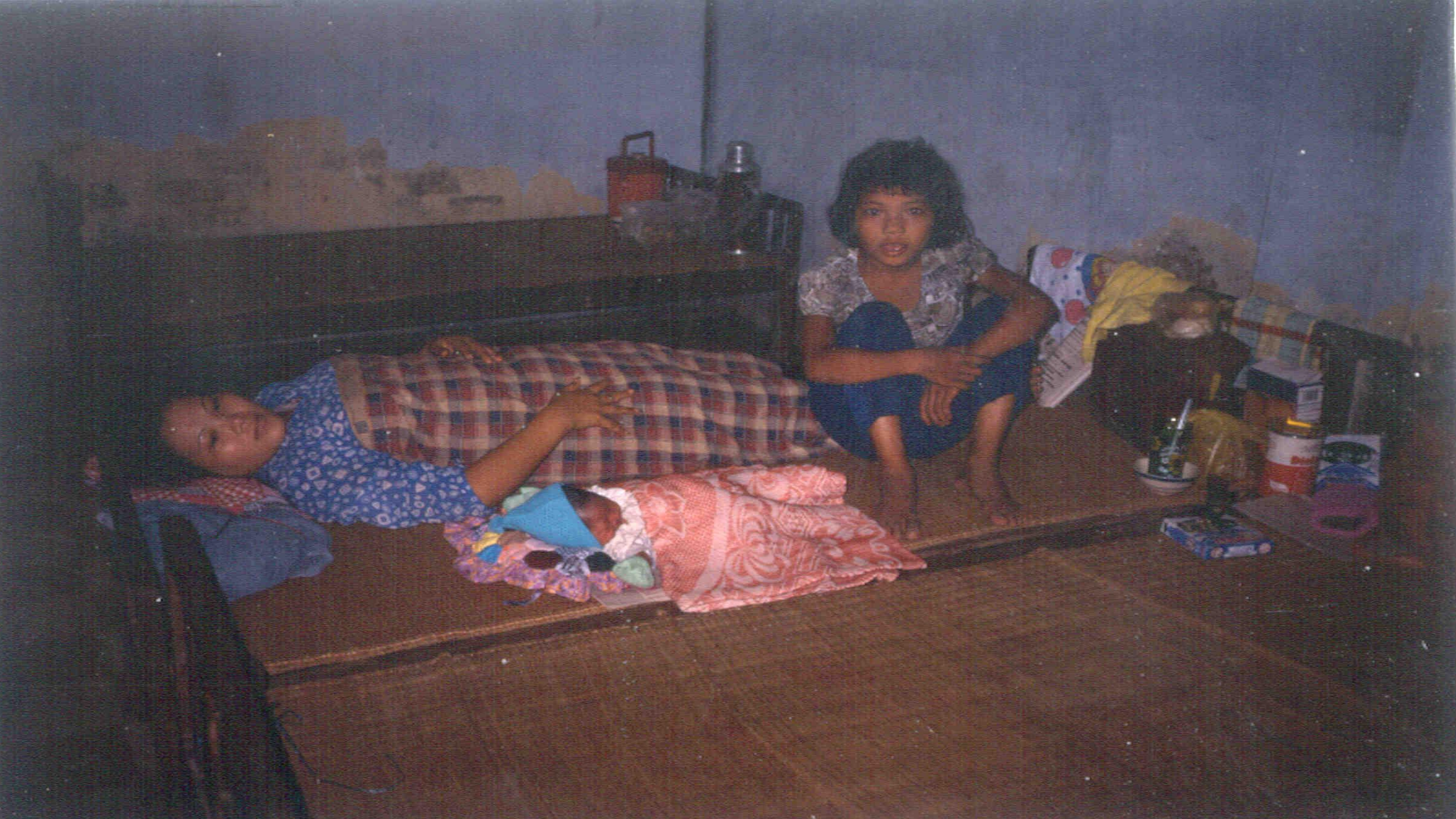
Louis-Victor Marcé, 1858

Puerperal insanity

Robert Gooch, 1859

CHILDBEARING AND MENTAL HEALTH PROBLEMS AMONG WOMEN

- Epidemiology of ‘parapartum mental illness’ (Paffenberger, 1964)
- ‘Atypical depression’ following childbirth (Pitt, 1968);
- Subsequent major focus of research: >200,000 academic papers, lay accounts and resources from high–income countries;
- Major disparity in the availability of evidence from resource-constrained nations;



SCIENCE, TRADITIONAL CARE AND PERINATAL MENTAL HEALTH

Women who live in low- and lower-middle income countries experience traditional ritualized care after birth including:

- Mandated periods of rest;
- Honoured status;
- Increased practical support and freedom from household and income-generating work;
- Social seclusion;
- Gift giving and prescribed foods

- These protect mental health and therefore;
- They do not experience perinatal mental disorders.

Stern and Kruckman, 1983; Howard, 1993

NATURE OF PERINATAL MENTAL HEALTH PROBLEMS AMONG WOMEN

General agreement, that three conditions are relevant:

- Postpartum psychosis, consistent prevalence worldwide of 1 – 2 per 1000 births;
- Maternity, third-day or postpartum ‘blues’ follow up to 80% of births;
- Perinatal common mental disorders:

… depressive, anxiety, adjustment and somatoform disorders, which compromise day-to-day functioning…..

- In high-income countries:
  - ± 10% of pregnant women
  - ± 13% of mothers of infants

Goldberg D, Huxley P. *Common Mental Disorders: A Biosocial Model*. London: 1992; Hendrick, 1998; O’Hara and Swain, 1996

PREVALENCE OF PERINATAL COMMON MENTAL DISORDERS AMONG WOMEN IN LMICs

	Total N (number of studies)	Range of prevalence	Weighted mean prevalence	95% CI
Pregnancy CMD (all studies)	**5774 (13)**	**5.2-32.9**	**15.9**	**15.0–16.8**
Tertiary hospitals	2190 (5)	5.2-14.4	10.3	10.1-10.4
Provincial or district health services	1526 (5)	8.3-32.9	17.8	17.4-18.3
Community	2058 (3)	12.0-33.0	19.7	19.2-20.1
Postnatal CMD (all studies)	**11,581 (34)**	**4.9-59.4**	**19.8**	**19.2-20.6**
Tertiary hospitals	3600 (11)	9.1-27.2	13.6	13.5-13.8
Tertiary hospital and community clinic(s)	2876 (7)	4.9-32.9	18.9	18.7-19.3
Provincial or district health services	3999 (12)	6.1-35.5	20.4	20.1-20.8
Community	1106 (4)	28.0-59.4	39.4	38.6-40.3

Fisher J, Cabral de Mello M, Patel V, Rahman A, Tran T, Holton S, Holmes W. Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. *Bulletin of the World Health Organization* 2012;90(2):139G-49G.

COMMON PERINATAL MENTAL DISORDERS AMONG WOMEN

Setting	WBG classification	Prevalence
Private maternity hospital in Ballarat a rural area in Australia, Kalra, Reilly and Austin, 2018	High-income	4%
Ha Nam Province in rural Vietnam, Fisher, Tran TDT, thi La, Kriitmaa, Rosenthal, Tran T, 2010	Lower-middle income	29.9%; 95% CI: 25.20 - 34.70
Swat Valley in Pakistan a conflict affected rural area Khan, Chiumento, Dherani, Bristow, Sikander, Rahman, 2015	Low-income	38.1%; 95% CI: 33.1 - 43.3

RISK FACTORS FOR PERINATAL CMD AMONG WOMEN IN LMICs

- **Socio economic disadvantage** (OR range: 2.1–13.2) : adolescent; religious or ethnic minority group; rural rather than an urban area; hunger in previous month, unable to pay for essential health care; low-income; holding a 'poor card';
- **Quality of relationship with the intimate partner** (OR range: 2.0–9.4): unsupportive, rejecting the pregnancy; polygamy; alcoholism;
- **Family violence** (OR range 2.11–6.75): criticism, coercion, intimate partner violence, worse if the baby is a girl than a boy;
- **Quality of family relationships** (OR range 2.1–4.4): critical mother-in-law, geographic separation from own mother;
- **Reproductive health** (OR range: 1.6–8.8): unwanted or unintended pregnancy; previous stillbirth; coincidental illness; premature birth; caesarean birth
- **Past history of mental health problems** (OR range 5.1–5.6)

Fisher J, Cabral de Mello M, Patel V, Rahman A, Tran T, Holton S, Holmes W. Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. *Bulletin of the World Health Organization* 2012;90(2):139G-49G.

PROTECTIVE FACTORS FOR PERINATAL CMD AMONG WOMEN IN LMICs

- **Education** (RR 0.5; p=0.03) ;
- **Employment** (OR: 0.64; 95% CI: 0.4–1.0) including income security while away from the workforce to care for an infant;
- Provision of **structured direct care** by a trusted person, preferably a woman's own mother (OR: 0.4; 95% CI: 0.3–0.6) ;
- **Confiding affectionate relationship** with the intimate partner (OR: 0.52; 95% CI: 0.3–0.9).

Fisher J, Cabral de Mello M, Patel V, Rahman A, Tran T, Holton S, Holmes W. Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: a systematic review. *Bulletin of the World Health Organization* 2012;90(2):139G-49G.

MENTAL HEALTH AND MATERNAL MORTALITY

- Suicide rates are underestimated because maternal mortality data are restricted to the first 42 days after childbirth
- British Centre for Maternal and Child Enquiries (2006 – 2008) 0.57 deaths by suicide per 100,000 maternities; but
- Increased to 1.27 per 100,000 if increased to first six postpartum months (Cantwell et al, 2011)

MENTAL HEALTH AND MATERNAL MORTALITY

Limited data from resource-constrained countries;

- **Haryana, India**, 20% of 219 deaths among 9894 women postpartum, in 1992, were due to suicide or accidental burns. (Lal et al, 1995)
- Maputo Central Hospital, **Mozambique**, 9 of 27 (33%) postpartum deaths (1991–1995) not attributable to pregnancy or coincidental illness were by suicide, 7 of these in women aged less than 25 years. (Granja et al, 2002)
- **Viet Nam**, verbal autopsies of all maternal deaths in seven provinces (2000 – 2001) found that overall 8%, but in some provinces 16.5% were by suicide, with problematic 'community behaviours towards women' a contributing factor. (WHO WPRO 2005)
- **Nepal**, the Department of Health Services examined maternal deaths 1998 – 2008 in 8 districts and found that while there was an overall reduction in deaths from 539 to 229 per 100,000 live births, suicide was the leading cause, accounting for 16%. (Karki, 2011)

CONSEQUENCES OF PERINATAL CMD FOR SELF-CARE

Iodine status in late pregnancy and psychosocial determinants of iodized salt use in rural northern Viet Nam

Jane Fisher,[a] Thach Tran,[a] Beverley Biggs,[b] Tuan Tran,[c] Terry Dwyer,[d] Gerard Casey,[b] Dang Hai Tho[c] & Basil Hetzel[e]

Objective To establish iodine status among pregnant women in rural northern Viet Nam and explore psychosocial predictors of the use of iodized salt in their households.

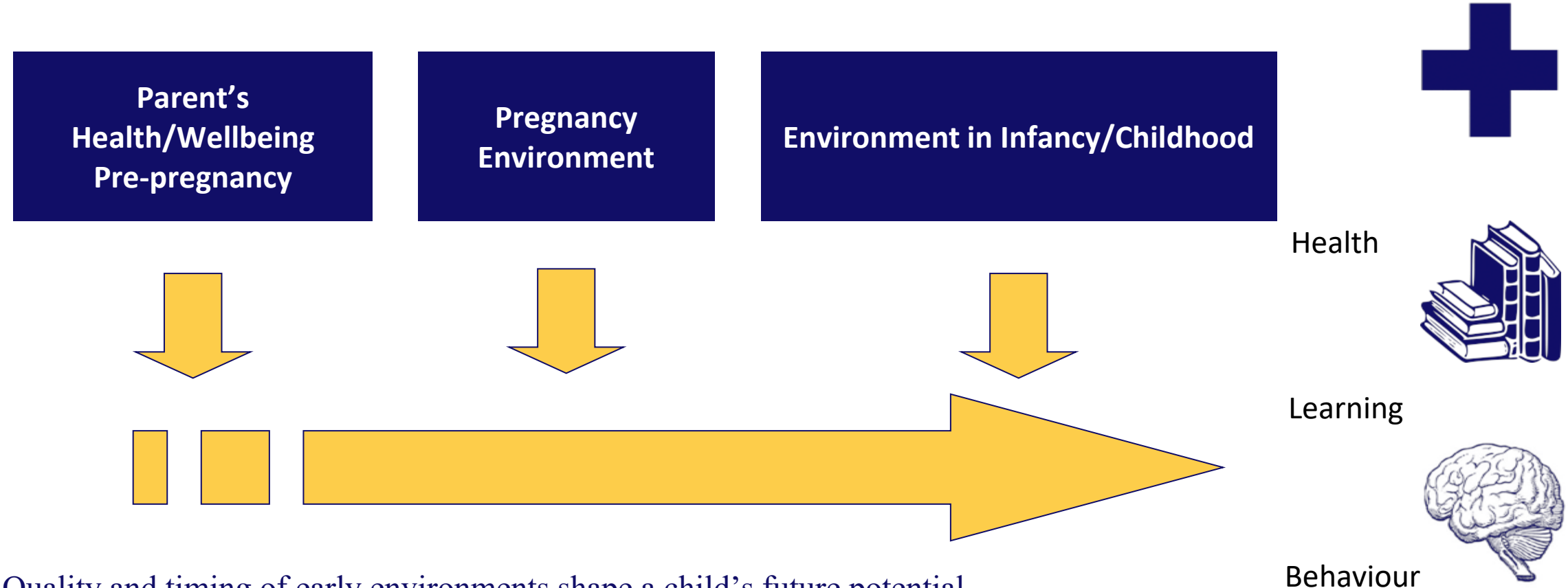
Methods This prospective study included pregnant women registered in health stations in randomly-selected communes in Ha Nam province. At recruitment (< 20 weeks of gestation), sociodemographic factors, reproductive health, intimate partner relationship, family violence, symptoms of common mental disorders and use of micronutrient supplements were assessed. During a second assessment (> 28 weeks of gestation) a urine specimen was collected to measure urinary iodine concentration (UIC) and iodized salt use was assessed. Predictors were explored through univariable analyses and multivariable linear and logistic regression.

Findings The 413 pregnant women who provided data for this study had a median UIC of 70 µg/l; nearly 83% had a UIC lower than the 150 µg/l recommended by the World Health Organization; only 73.6% reported using iodized salt in any form in their households. Iodized salt use was lower among nulliparous women (odds ratio, OR: 0.56; 95% confidence interval, CI: 0.32–0.96); less educated women (OR: 0.34; 95% CI: 0.16–0.71); factory workers or small-scale traders (OR: 0.52; 95% CI: 0.31–0.86), government workers (OR: 0.35; 95% CI: 0.13–0.89) and women with common mental disorders at recruitment (OR: 0.61; 95% CI: 0.38–0.98).

Conclusion The decline in the use of iodized salt in Viet Nam since the National Iodine Deficiency Disorders Control Programme was suspended in 2005 has placed pregnant women and their infants in rural areas at risk of iodine deficiency disorders.

Fisher, Tran, Biggs, Tran, Dwyer, Casey, Tho, Hetzel, *Bulletin of the World Health Organization*, 2011; 89: 813 - 820

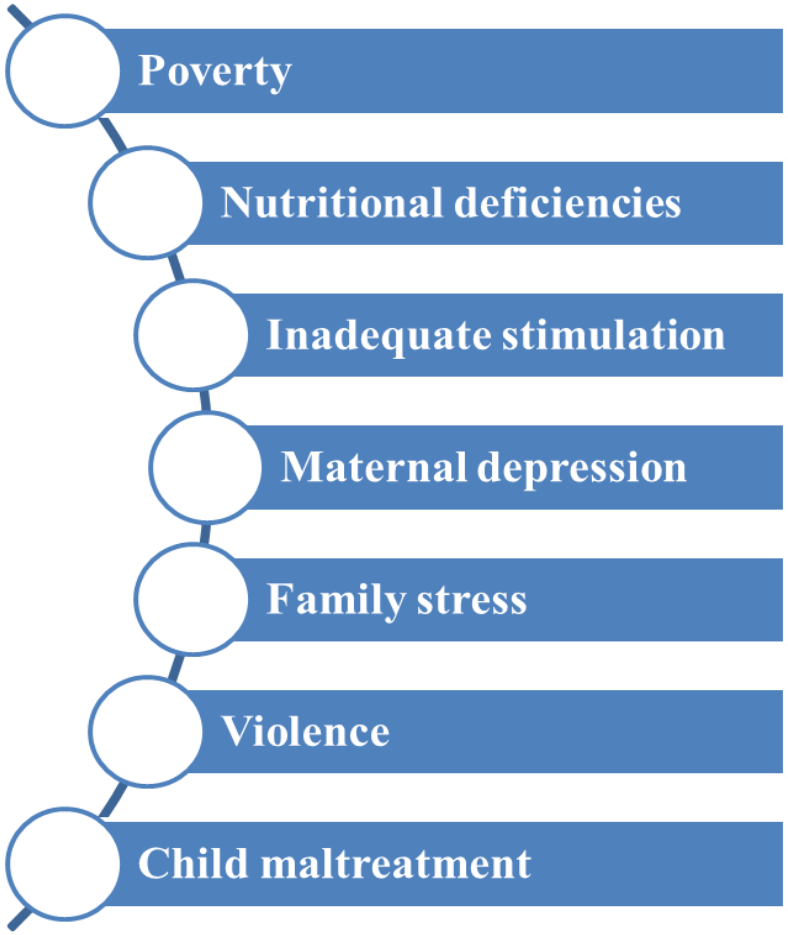
CRITICAL PERIODS FOR EARLY CHILDHOOD DEVELOPMENT



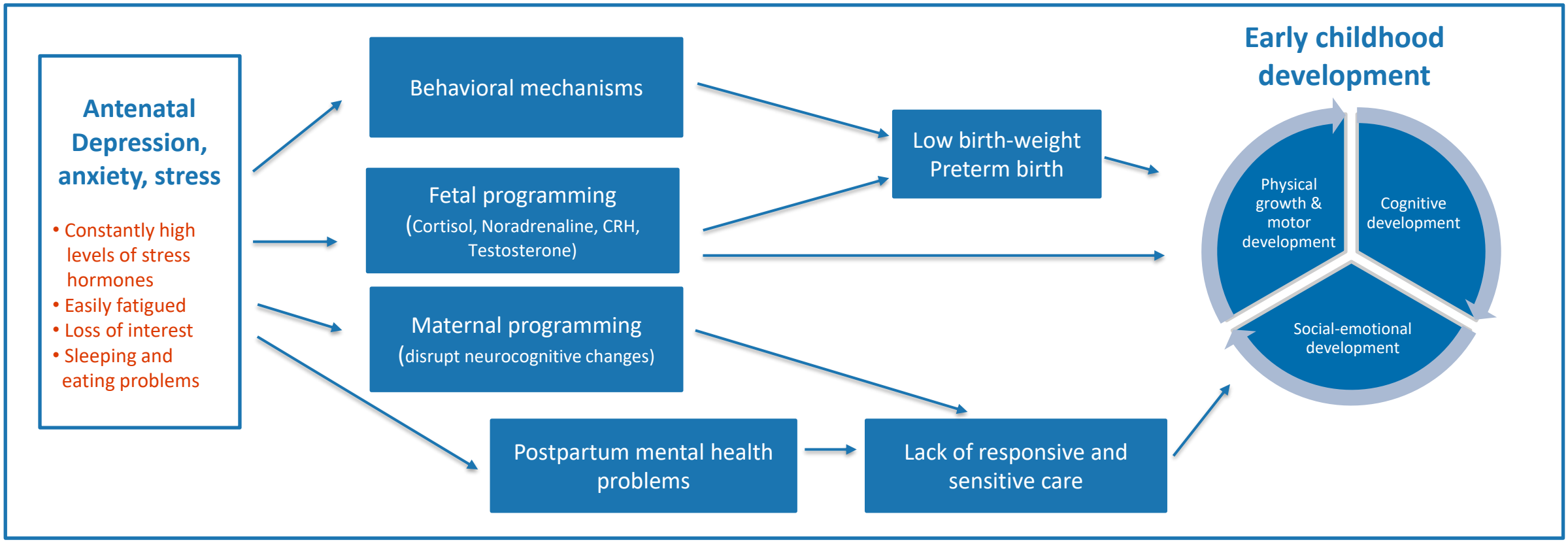
Quality and timing of early environments shape a child's future potential

RISK FACTORS PREVENTING CHILDREN TO DEVELOP TO FULL POTENTIAL

- Children in low- and middle-income countries are often exposed to multiple risks
- Addressing maternal physical and mental health is important

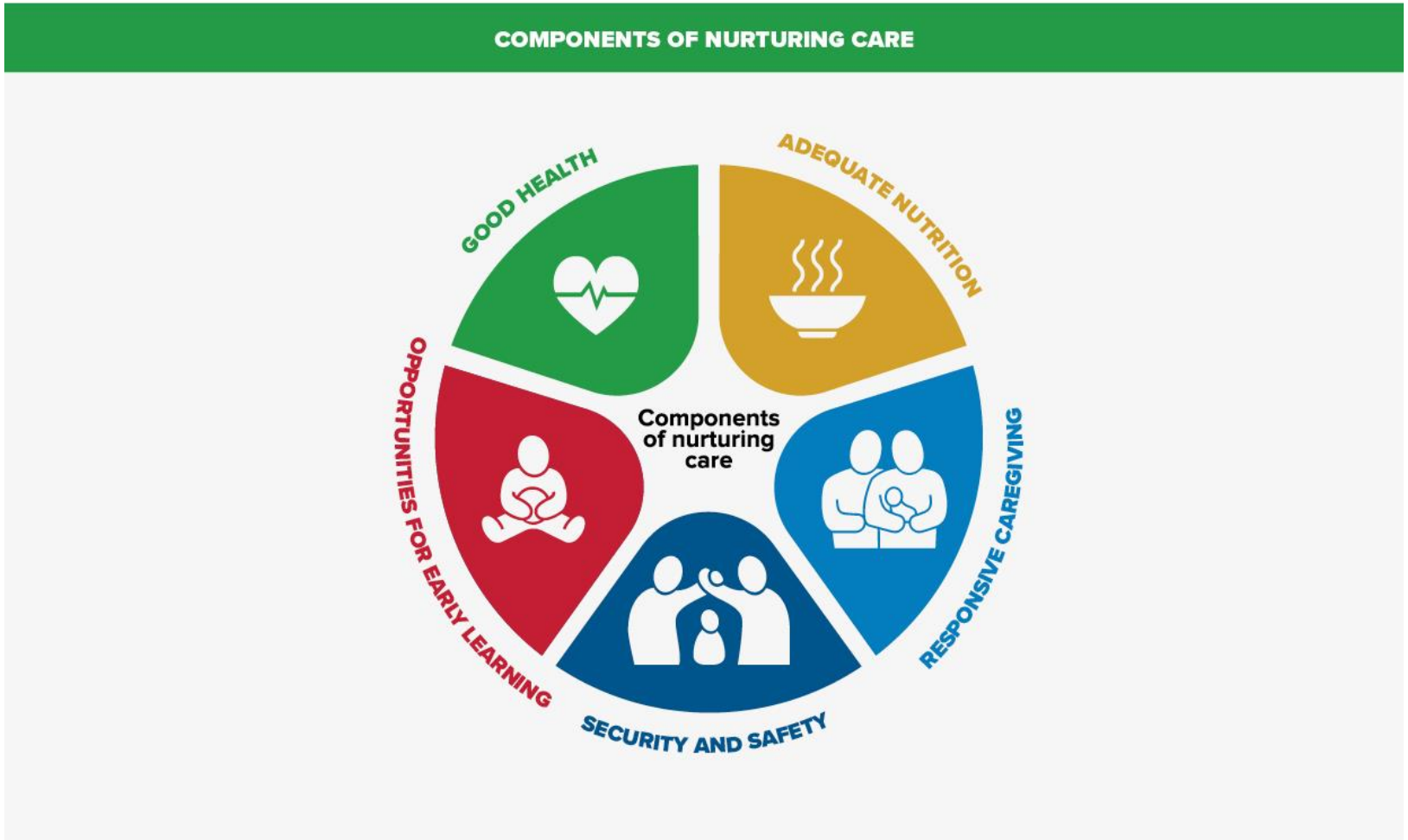


MECHANISMS OF THE EFFECT OF PERINATAL MENTAL HEALTH PROBLEMS ON EARLY CHILDHOOD DEVELOPMENT



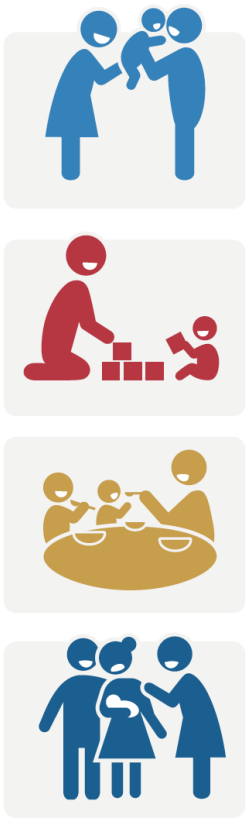
Stein et al. 2014, Tran et al. 2013, 2014, Lancet series on ECD 2007, 2011 and 2016

NURTURING CARE: WHAT THE CHILD'S BRAIN NEEDS AND EXPECTS FOR OPTIMAL DEVELOPMENT



WORLD HEALTH ORGANIZATION GUIDELINE FOR EARLY CHILDHOOD DEVELOPMENT

IMPROVING EARLY CHILDHOOD DEVELOPMENT: WHO Guideline



World Health Organization

RECOMMENDATIONS

In order to improve early childhood development, WHO recommends:

1 RESPONSIVE CAREGIVING

All infants and children should receive responsive care during the first 3 years of life; parents and other caregivers should be supported to provide responsive care.

Strength of recommendation: Strong
Quality of evidence: Moderate (for responsive care)

2 PROMOTE EARLY LEARNING

All infants and children should have early learning activities with their parents and other caregivers during the first 3 years of life; parents and other caregivers should be supported to engage in early learning with their infants and children.

Strength of recommendation: Strong
Quality of evidence: Moderate (for early learning)

3 INTEGRATE CAREGIVING AND NUTRITION INTERVENTIONS

Support for responsive care and early learning should be included as part of interventions for optimal nutrition of infants and young children.

Strength of recommendation: Strong
Quality of evidence: Moderate

4 SUPPORT MATERNAL MENTAL HEALTH

Psychosocial interventions to support maternal mental health should be integrated into early childhood health and development services.

Strength of recommendation: Strong
Quality of evidence: Moderate

MATERNAL MENTAL HEALTH: WHO NORMS AND STANDARDS

- WHO recommends integrating psychosocial interventions to support maternal mental health into early childhood health and development services in its *Guideline on improving early childhood development*
- WHO recommendations on postnatal care for the mother and the newborn – maternal mental health inclusion
- Thinking Healthy for child development - A low-intensity psychosocial intervention for maternal mental health
- MH-Gap intervention guide for non-specialists
- Maternal mental health implementation guide (being developed)
  - For programme managers to support integration of maternal mental health interventions into existing maternal and child health services and other programmes and services, including primary care and early child development services
  - It will provide detailed step-by-step information with practical tools to address integration across different dimensions, i.e. policies; planning; training and supervision; monitoring and evaluation; and, financial management.
  - Implementation workshops will be held with stakeholders in-country to get inputs from the field