

Effects of maternal morbidity on women's well-being and functioning: a systematic review

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ITM-ENSP 2015 Colloquium:

Towards Better Maternal and Neonatal Health Beyond 2015

Rabat, Morocco, 25 November 2015

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Aim and objective

Aim:

To provide recent epidemiological evidence on how maternal morbidity affects health-related functioning (HrF)

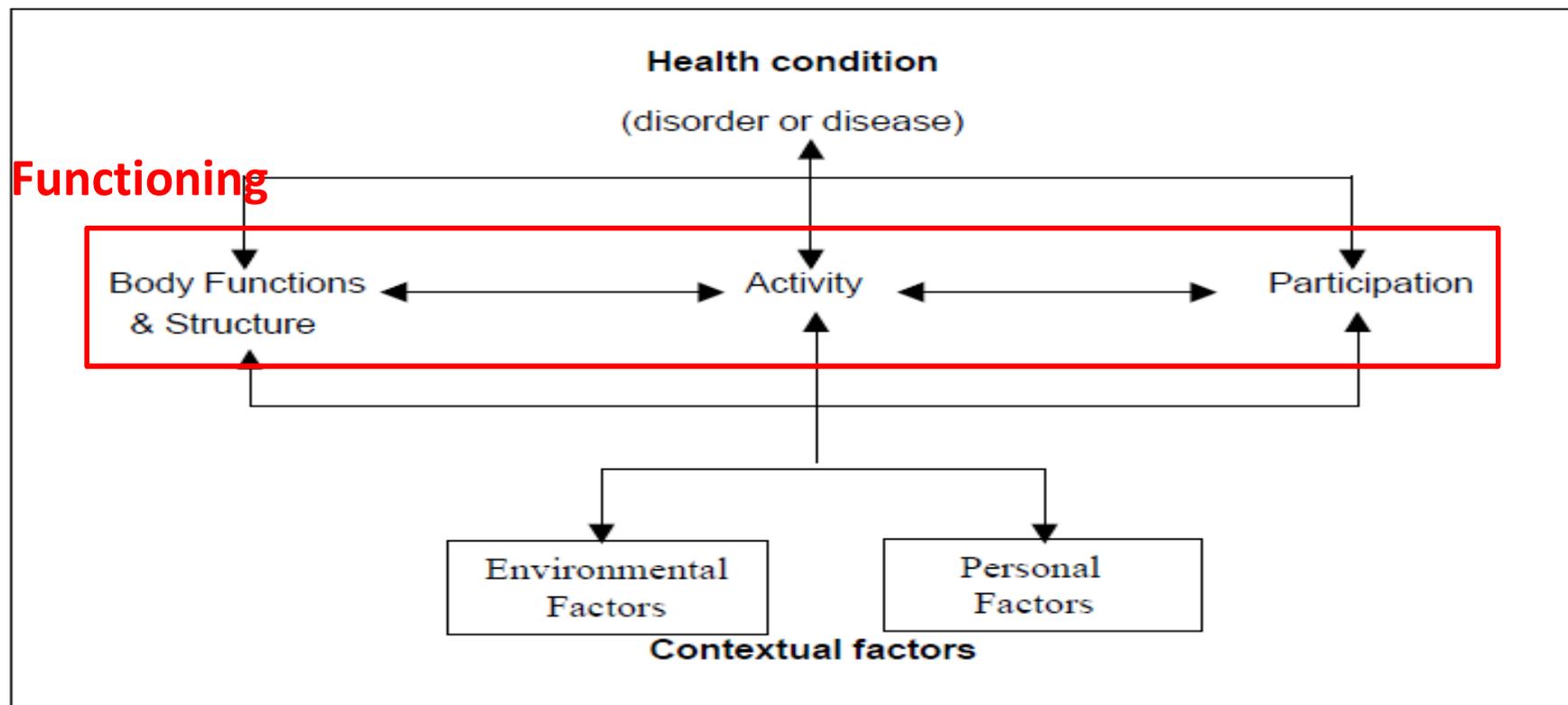
Objective:

To document **the levels and patterns** of health-related functioning as a consequence of direct obstetric complications



What is health-related functioning (HrF)?

- “ The International Classification of Functioning, Disability and Health (ICF) provides a framework of functioning and disability in the context of health.
- “ HrF refers to **all body functions, activities and participation**
- “ The concept of HrF is an inverse of disability



What is health-related functioning (HrF)?

E.g. WHO Disability Assessment Schedule (WHODAS) 2.0

- “ A general measure of health-related functioning and disability in daily practice in accordance with the ICF.

- “ Aimed to be applicable to any health conditions and across cultures in adult populations
 - . **Cognition** (understanding and communication);
 - . **Mobility** (moving & getting around);
 - . **Self-care** (hygiene, dressing, eating & staying alone);
 - . **Getting along** (interacting with other people);
 - . **Life activities** (domestic responsibilities, leisure, work & school);
 - . **Participation in society** (joining in community activities).



Methods (1)

- “ Protocol adapted from the WHO Systematic Review of Maternal Morbidity and Mortality
- “ 7 electronic databases were searched (MEDLINE, Embase, Popline, CINAHL Plus, LILACS, African Index Medicus (AIM) and the West Pacific Index Medicus (WPIM)
- “ The review has been registered in PROSPERO
- “ Screened by EPPI Reviewer
- “ A pilot test of 100 papers by three reviewers to ensure the quality of review



Methods (2)

“ Type of participants

Women who experienced maternal morbidity during pregnancy, childbirth or within one year after delivery or spontaneous abortion

“ Type of outcomes and exposure

Exposure = Maternal morbidity

Outcome = Disruption or deterioration of health-related functioning as a consequence of maternal morbidity

“ Search strategy

(General maternal morbidity OR direct obstetric complication OR indirect obstetric complication)

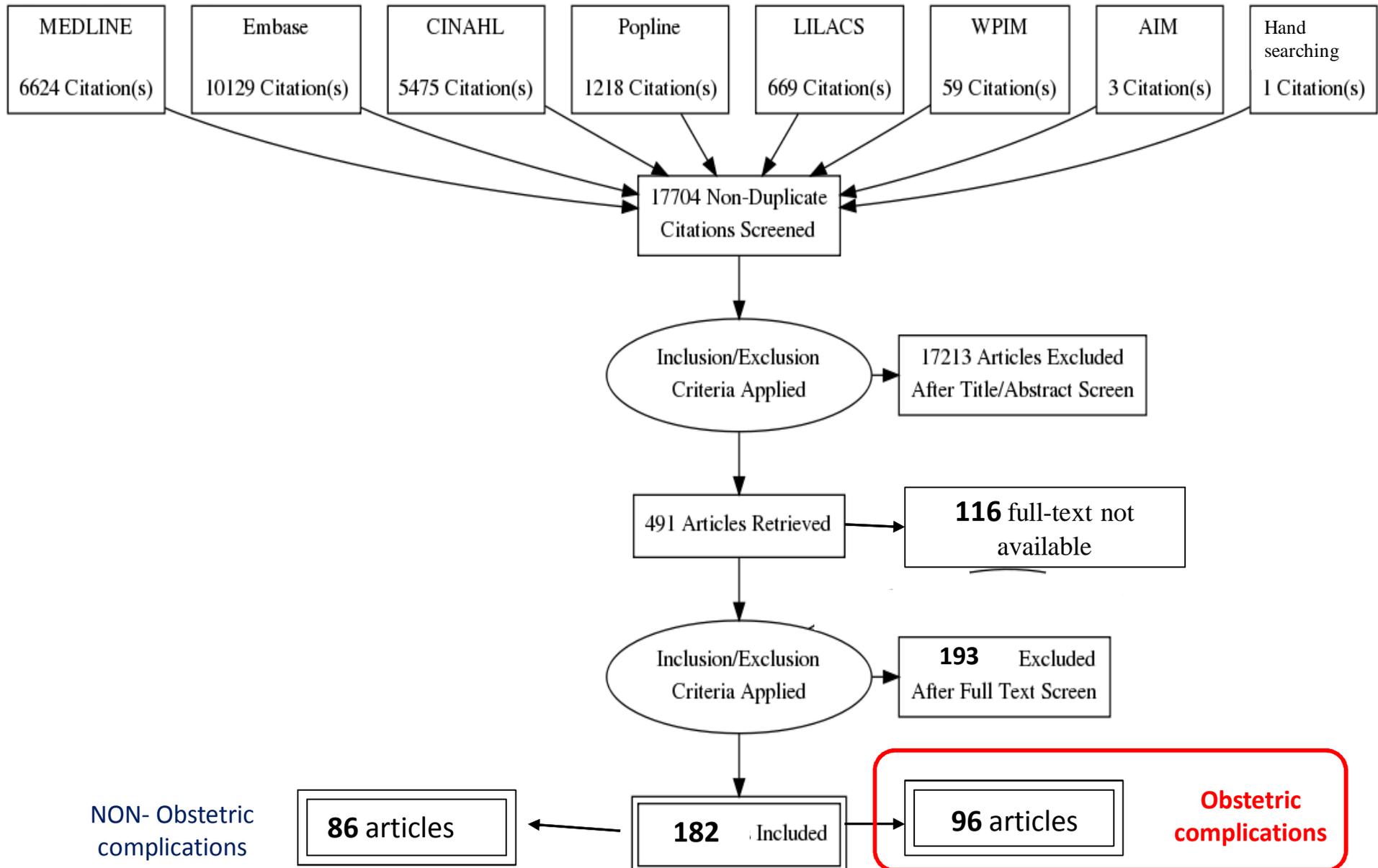
AND Health functioning

AND Type of studies

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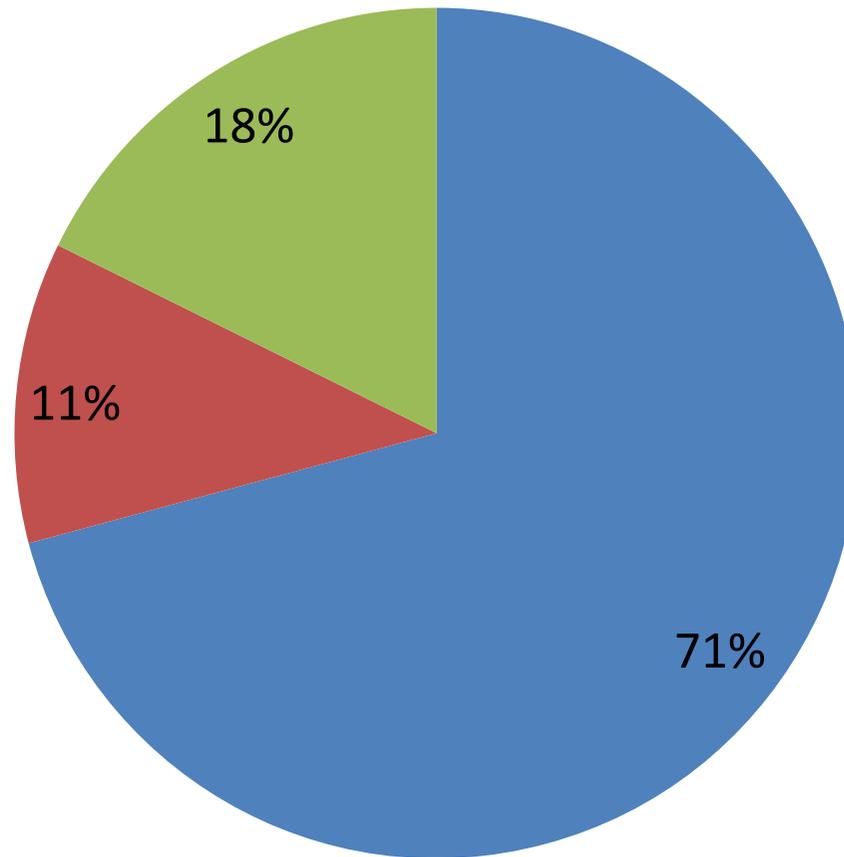


Results



Distribution of studies by country income-group

■ High income ■ Middle-income ■ Low-income

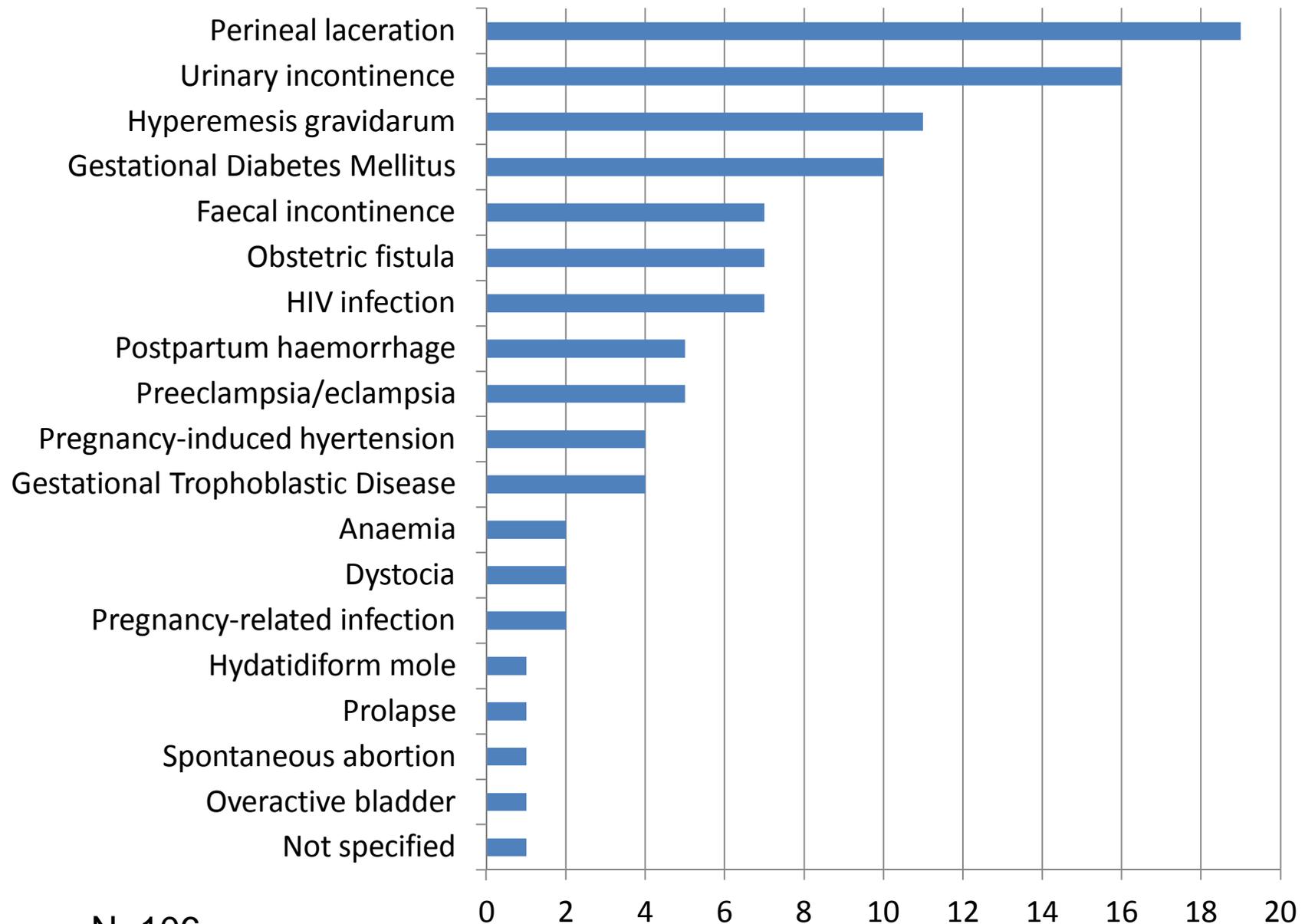


N=96 studies

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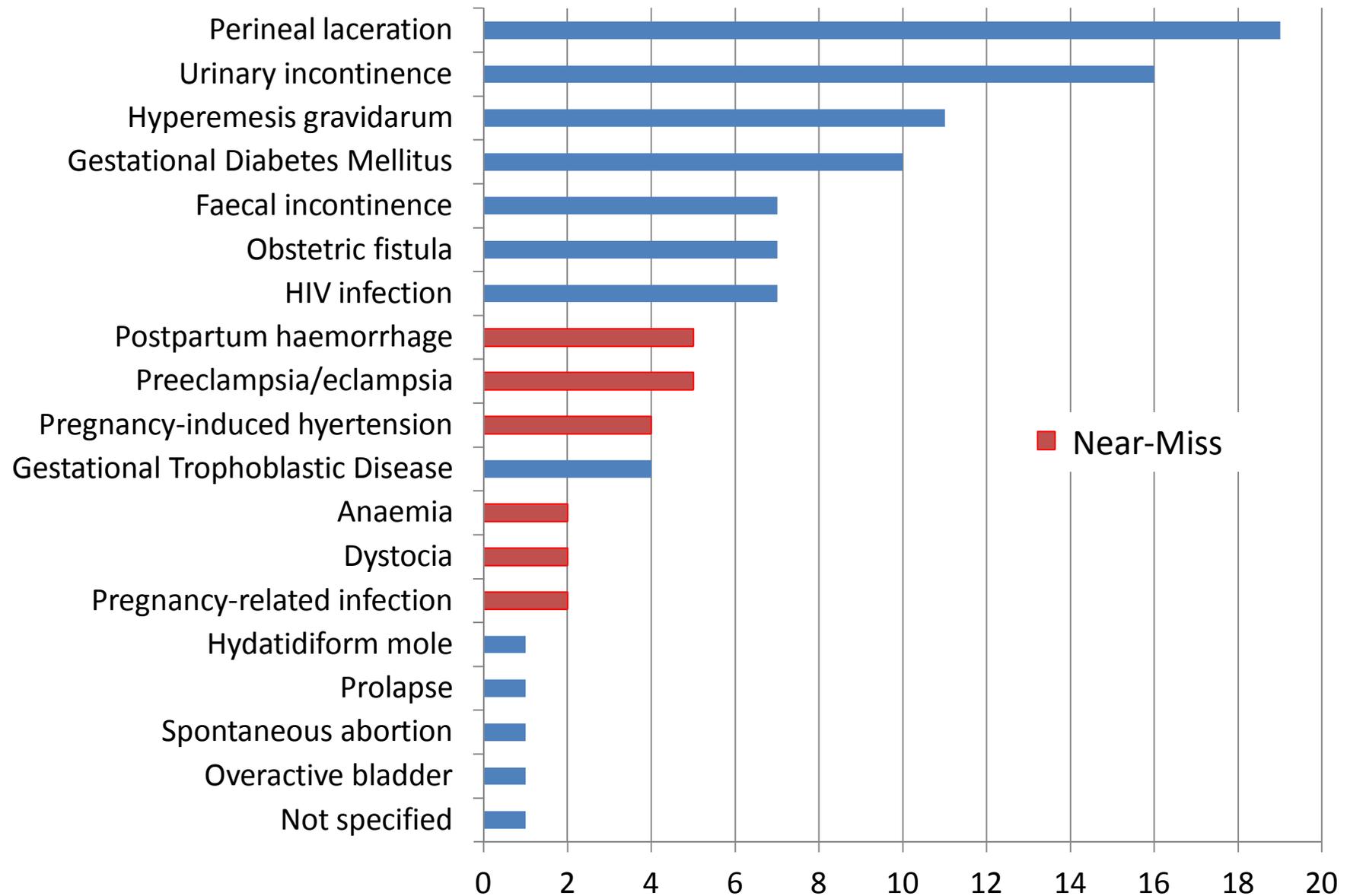
Distribution of studies by diagnosis



N=106

Note: Some studies assessed several diagnoses

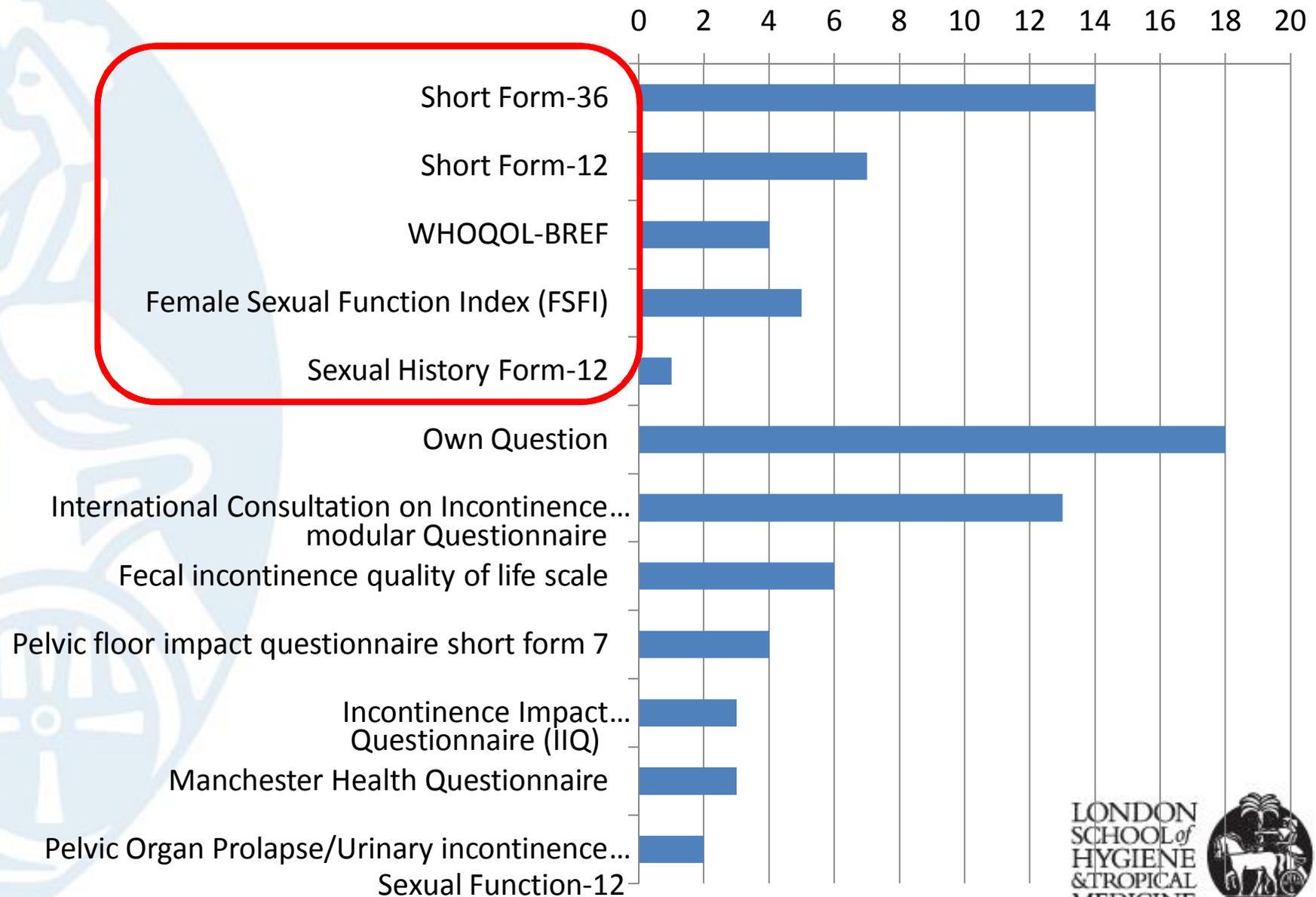
Distribution of studies by diagnosis



N=106

Note: Some studies assessed several diagnoses

Commonly used instruments measuring HrF



Note: Some studies used several instruments



Example: Hoedjes et al. 2011

- “ Prospective cohort study in the Netherland
- “ 174 postpartum women who experienced mild or severe preeclampsia
- “ Quality of life was measured at 6 and 12 week postpartum using Short Form-36

	Subscale	Mean at 6 wks	
		Mild	Severe
Summary	Physical component	47.7	43.9
	Mental health component	51.3	44.6
General	General health	76.8	67.8
Mobility	Bodily pain	77.1	63.7
	Physical functioning	86.4	76.9
Getting along	Mental health	81.9	69.5
	Vitality	57.6	48.4
Life activities	Role limitation due to physical problem(s)	56.3	41.3
	Role limitation due to emotional problem(s)	79.8	63.6
Participation	Social functioning	78	58.5

Limitations

- “ Challenges in operationalizing the concept of HrF
 - Overlap between ICF and International Classification of Diseases (ICD)
- “ Outcome measures vary across studies
- “ A larger number of titles identified



Summary

- “ The consequences of complications are frequent.
- “ Health-related functioning researched in an unsystematic manner
A larger number of studies focused on specific conditions
e.g. Perineal laceration, urinary & faecal incontinence
- “ Existing tools prepared for general population have been used frequently (e.g. SF-36) – Often no comparison group
- “ However, some important functioning for the pregnant or postpartum circumstances, e.g mother-infant interactions and ability to breastfeed, are often not addressed.
- “ New tools should be developed or existing tools should have specific modules adapted to the pregnancy and postpartum circumstances.



Thank you!

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WHO Disability Assessment Schedule (WHODAS) 2.0

	In the last 30 days, how much difficulty in:
Cognition	Learning a new task, for example, learning how to get to a new place?
	Concentrating on doing something for ten minutes?
Mobility	Standing for long periods such as 30 minutes?
	Walking a long distance such as a kilometer?
Self-care	Washing whole body?
	Getting dressed?
Getting along	Dealing with people you do not know?
	Maintaining a friendship?
Life activities	Taking care of your household responsibilities?
	Your day-to-day work/school?
Participation	How much of a problem did you have in joining in community activities in the same way as anyone else can?
	How much have you been emotionally affected by your health problem?

Health-related **functioning** vs Health-related **quality of life**

Health-related quality of life

- “Optimum levels of mental, physical role and social functioning, including relationships and perceptions of health, fitness, life satisfaction and wellbeing” (Bowling 2001)
- Also reflects satisfaction, expectations and aspirations
- ” Can include subjective well-being: individual perception on life satisfaction, affects (feeling or emotional states, e.g. happiness), and eudaemonia (a sense of meaning and purpose in life) (OECD 2013)



Exclusion Criteria

- “ Studies without relevant quantitative data
- “ Case reports, case series or case-control studies
- “ Studies with less than 30 eligible women with maternal morbidity.
- “ Reports published before 2005
- “ Induced abortion or caesarean section as exposure
- “ Clinically diagnosed outcomes and outcomes assessed by a screening tool (e.g. Edinburgh Postnatal Depression Scale (EPDS) or the Kessler Psychological Distress Scale (K-10))

