



WORKSHOP , Swiss Public Health Conference 2017

***Breastmilk as personalised medicine. Analysis of the determinants of breastfeeding in Switzerland using the the Swiss Model for Outcome Classification.***

**1. What impacts on breastfeeding duration?**

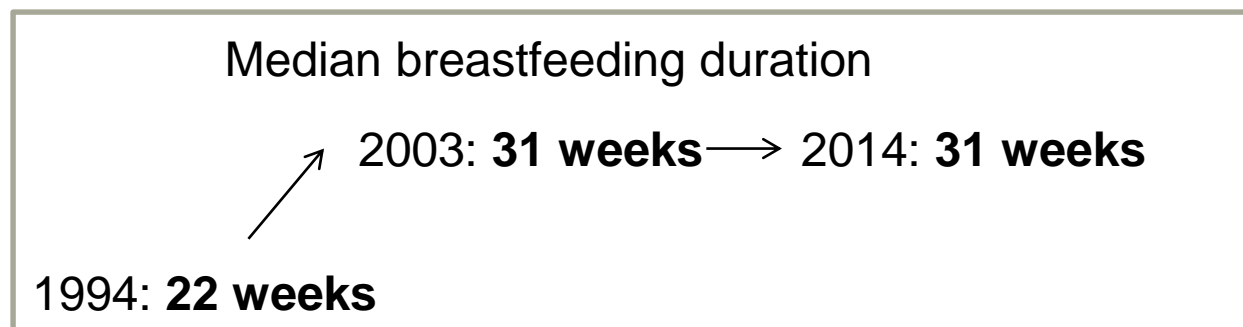
Results of the Swiss Infant Feeding Study (SWIFS) 2014

Anna Späth

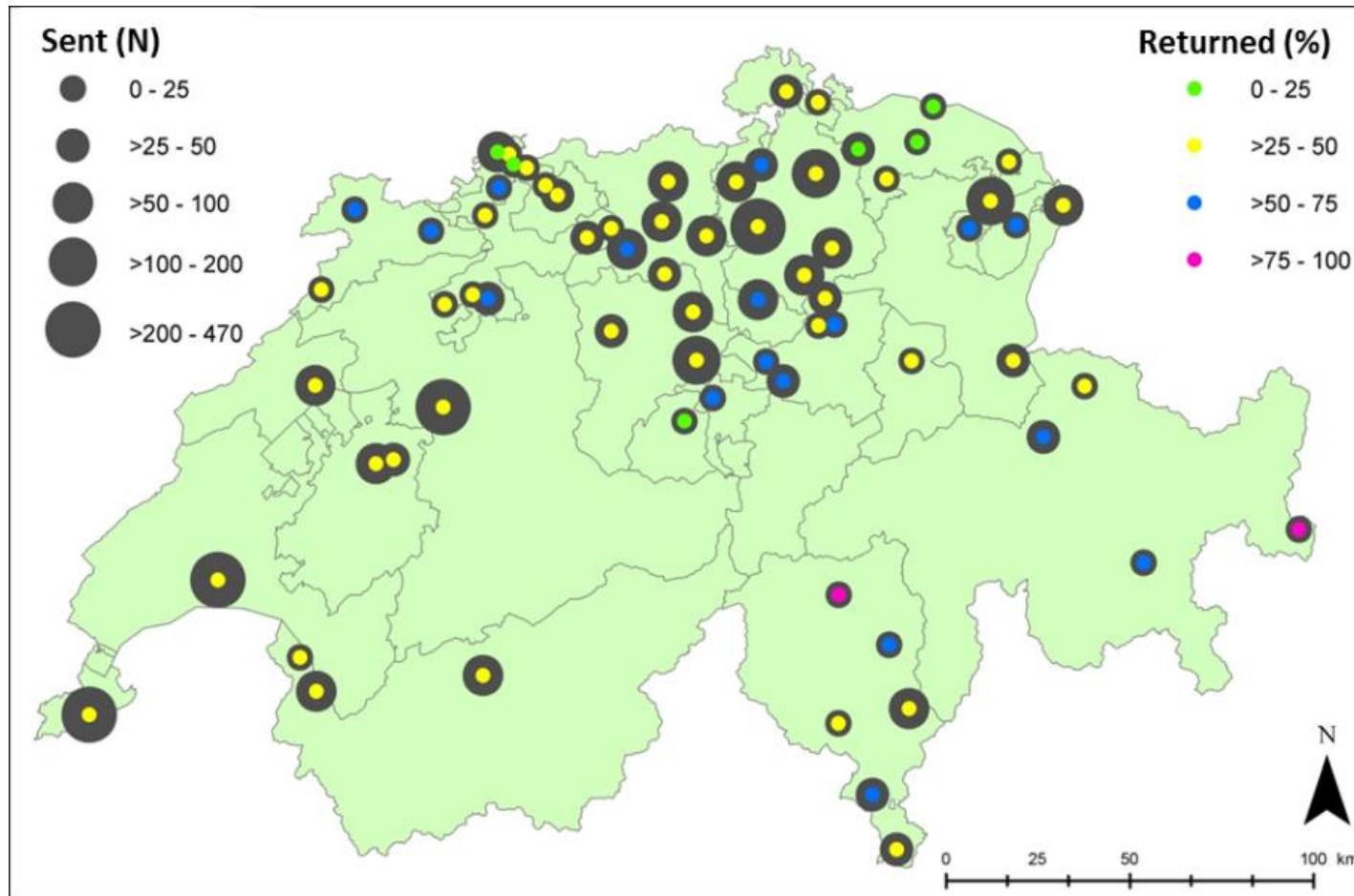
# Swiss Infant Feeding Study 2014

National monitoring study

- on breastfeeding and infant feeding and
- mother and child health
- Funded by the Federal Office of Public Health and the Federal Food Safety and Veterinary Office
- Previous surveys in 1994 and 2003
  - Comparison with European and WHO reporting
  - Trends over time



# Study design



Cross-sectional

Postal questionnaire

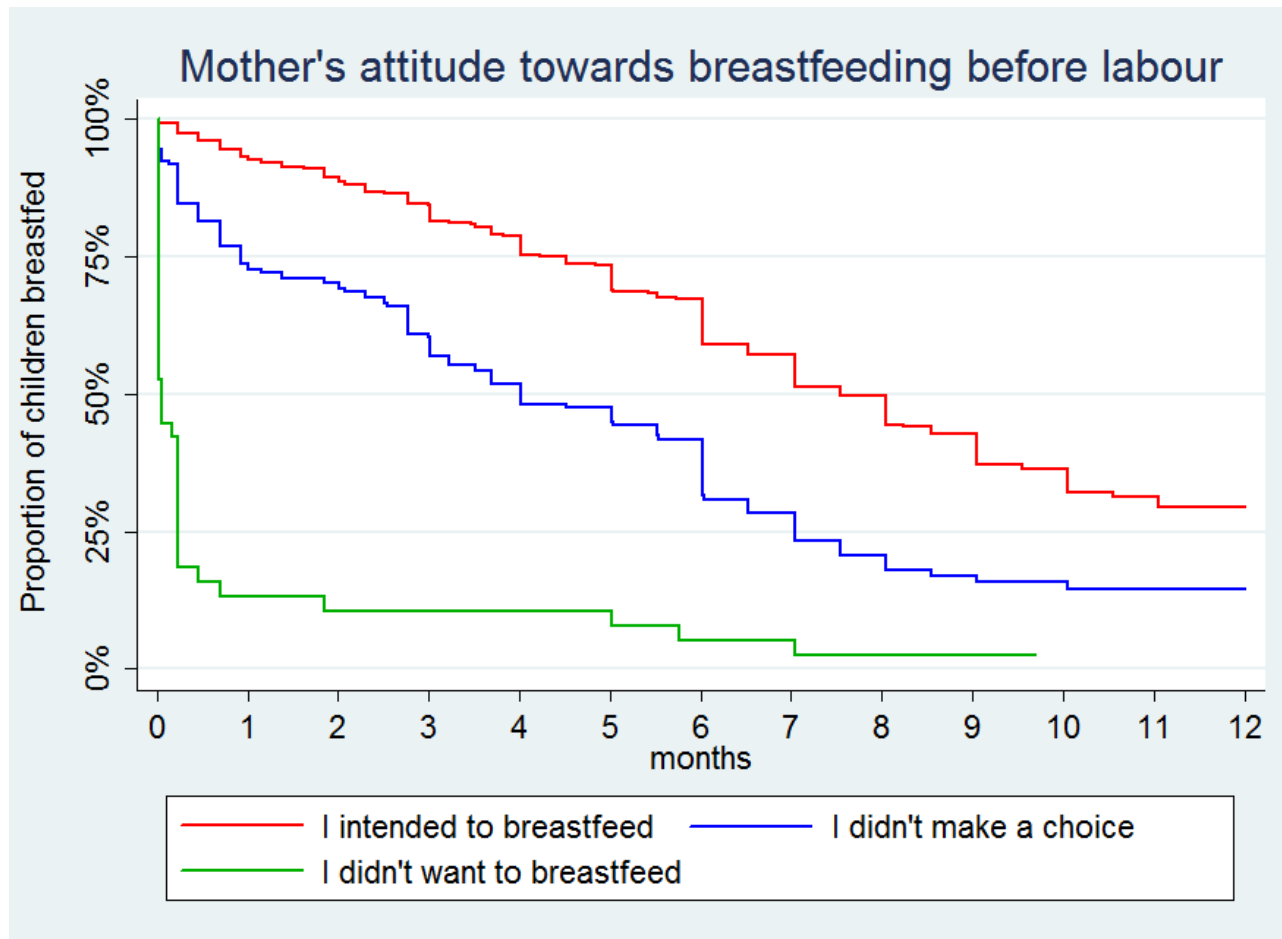
Response rate: 41%



## Results: Mother's attitude towards breastfeeding (before labour)

	N	
I intended to breastfeed	1289	84%
I didn't make a choice	198	13%
I didn't want to breastfeed	39	2.5%
No answer	9	0.5%
TOTAL	1535	100%

# Results: Breastfeeding rates according to mother's attitude – Kaplan-Meier Curves



Log Rank Test  
p=0.00

## Results: The risk of stopping breastfeeding and mother's attitude – Cox Regression Analyses

	Adjusted Hazard Ratio (HR)	95% CI
I intended to breastfeed	1	
I didn't make a choice	2.1	1.7-2.5
I didn't want to breastfeed	9.2	6.4-13.4

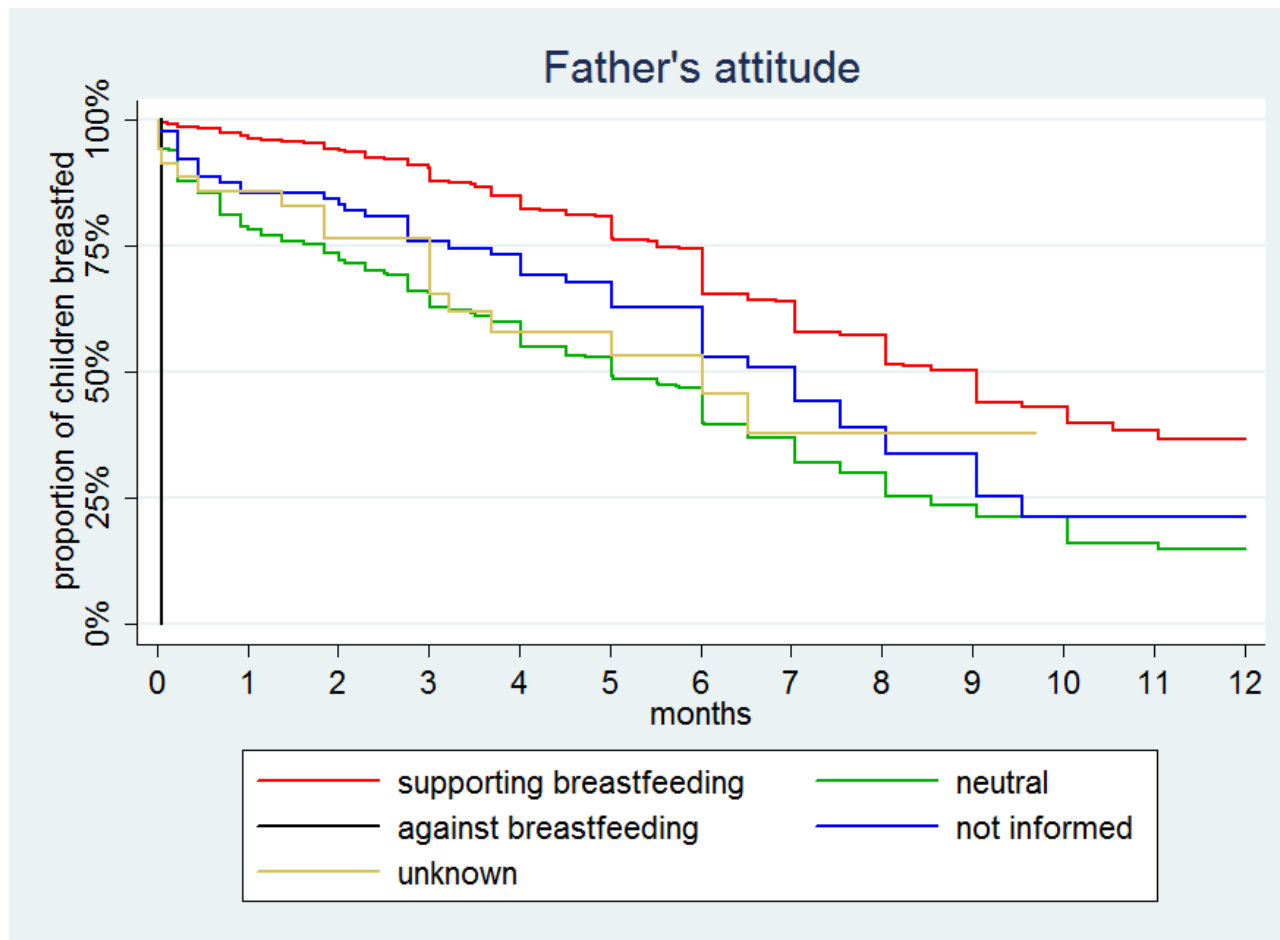
-> Significant higher risk of stopping breastfeeding if the mother did not make a decision before or did not want to breastfeed compared to mother's who intended to breastfeed their child after birth.

The HR is adjusted for maternal age and nationality, parental education, income, working mother, single mother, region, BMI, smoking status

## Results: Father's attitude towards breastfeeding (before labour), reported by the mothers

	N	
Thought, that it is important to practice breastfeeding	782	51%
Was fine with both, bottle or breastfeeding	616	40%
He was not informed	91	6%
I don't know	35	2%
He didn't want me to breastfeed	1	<1%
No answer	10	<1%
TOTAL	1535	

# Results: Breastfeeding rates and father's attitude – Kaplan-Meier Curves





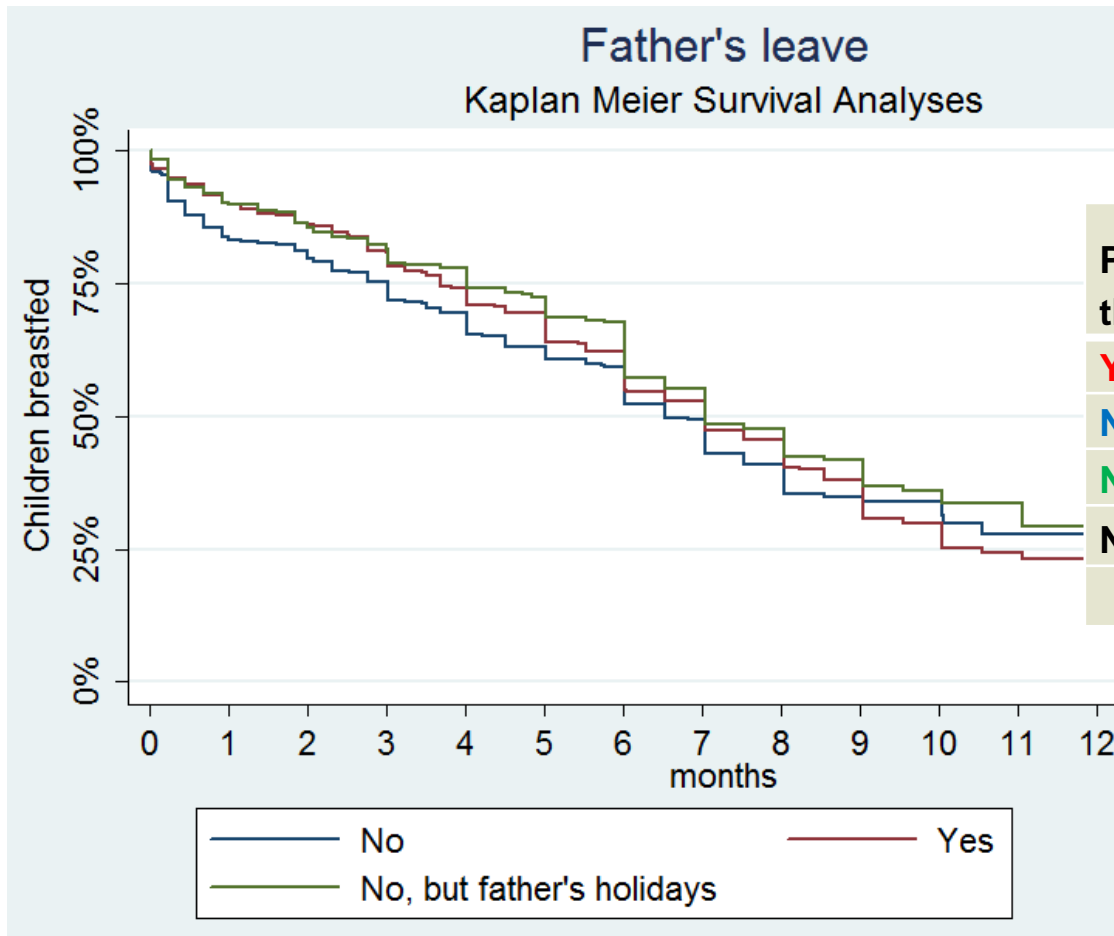
## Results: The risk of stopping breastfeeding and father's attitude (before labour) – Cox regression analyses

	Adjusted Hazard Ratio (HR)	95% CI
Supporting breastfeed	1	
not informed	1.7	1.2-2.3
neutral infant feeding attitude -> is fine with both, either breast or bottle feeding	2.5	1.71-2.86

-> Significant higher risk of stopping breastfeeding if the father was not informed or had a neutral feeding attitude compared to fathers who wanted the mother to breastfeed their child after birth.

The HR is adjusted for maternal age and nationality, parental education, income, working mother, single mother, region, BMI, smoking status

# Results: Paternity leave and mother's breastfeeding



Paternity leave for the father?	N	%
<b>Yes</b>	684	46
<b>No</b>	404	26
<b>No, but holidays</b>	355	23
<b>No information</b>	92	6
<b>TOTAL</b>	1535	

-> No significant differences

Log Rank Test  
p=0.12

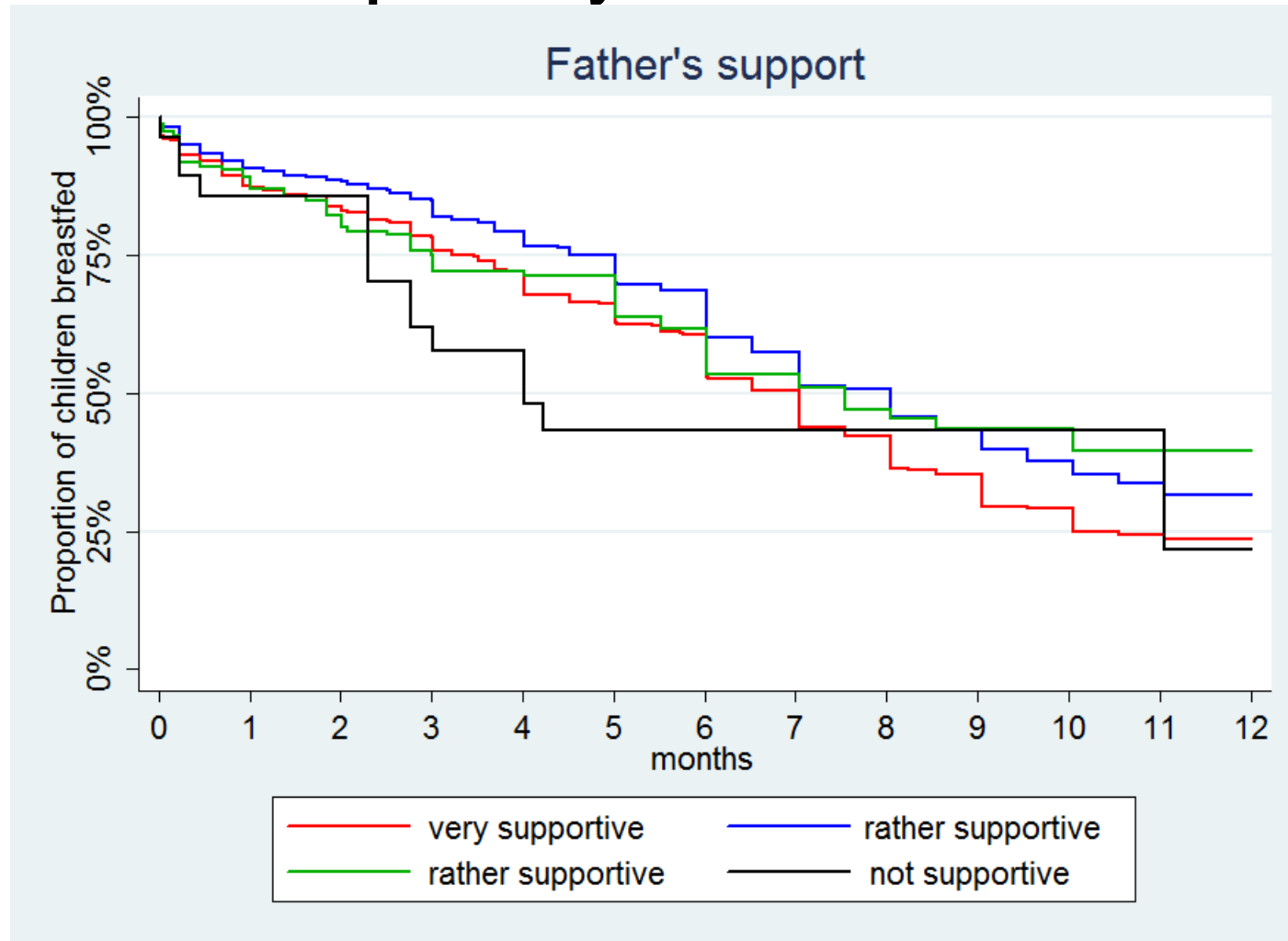
## Results: Father's support

Four dimensions of support were asked with a 5-point Likert scale

- a) Support with regard to childcare
- b) Support during the nights
- c) Support in the household
- d) Support in case a child is sick

	N	
Very supportive	915	60%
Rather supportive	409	27%
Less supportive	146	10%
Not supportive	29	1%
No answer	39	2%
TOTAL	1535	

# Results: Breastfeeding rates and father's support - Kaplan-Meier curve



Log Rank Test  
p=0.01

## Results: The risk of stopping breastfeeding and father's support – Cox regression analyses

	Adjusted Hazard Ratio (HR)	95% CI
Very supportive	1	
Rather supportive	0.72	0.60-0.87
Less supportive	0.76	0.58-0.99
Not supportive	1.1	0.66-1.9

-> Significant higher risk of stopping breastfeeding, if the father was very supportive compared to rather and less supportive fathers.

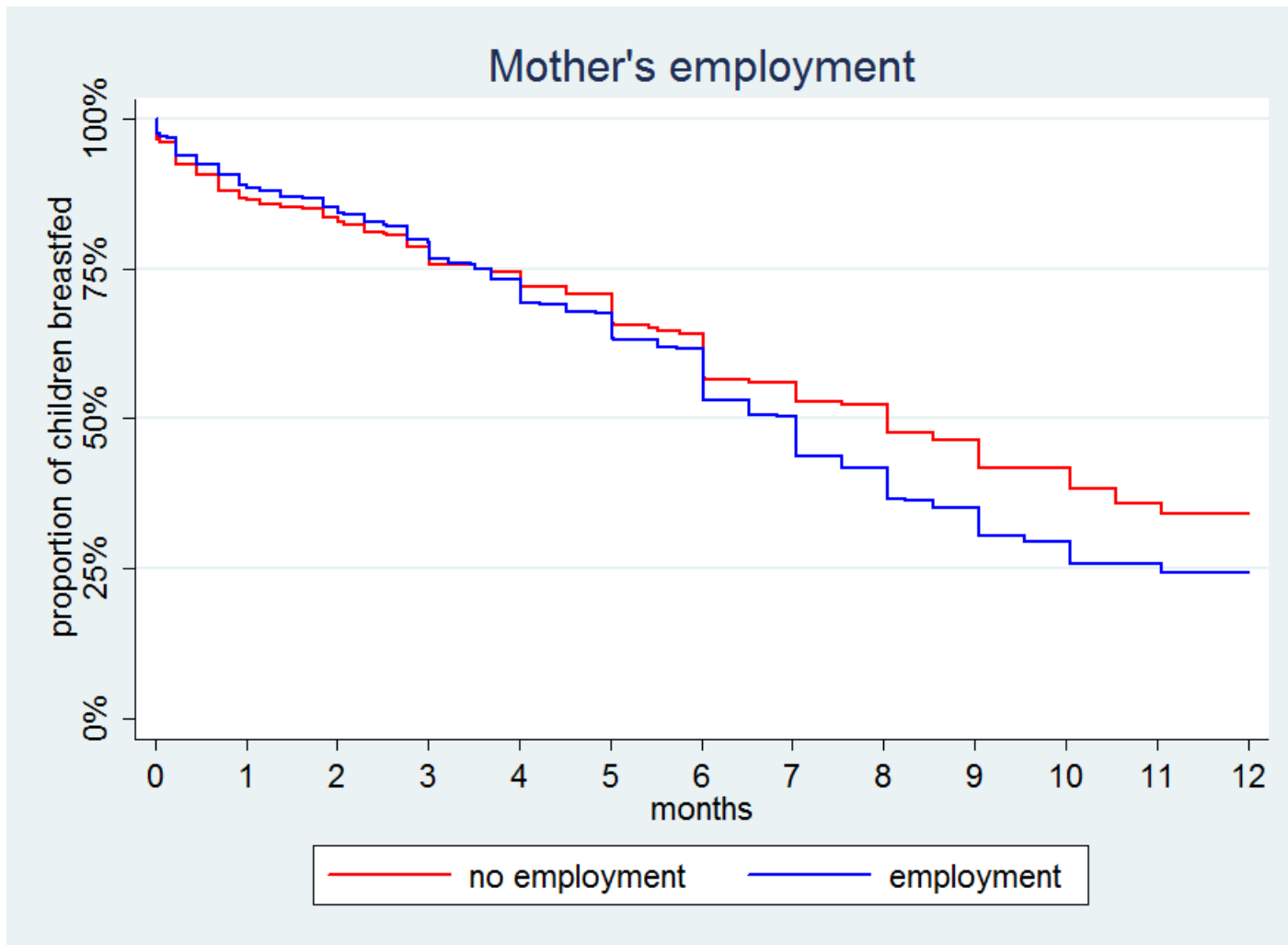
The HR is adjusted for maternal age and nationality, parental education, income, working mother, single mother, region, BMI, smoking status

## Results: Work

Mother's employment	N	
Not planned to return to job	406	26%
Returned to job or planning to do so	1129	74%
TOTAL	1535	100%

Percentage (if current / planned job)	N	
Fulltime	62	5%
Part time $\geq$ 50%	458	41%
Part time $<$ 50%	384	34%
No answer / not clear	225	20%
TOTAL	1129	100%

# Results: Work



## Results: Work

	Adjusted Hazard Ratio (HR)	95% CI
Not planned to return to work	1	
Returned to work or planned to do so	1.3	1.1-1.6

-> Significant higher risk of stopping breastfeeding if the mother returned to work or was planning to do so, compared to mothers without job obligation

-> No significant difference according to the percentage of the employment. It is shown (trend) that the higher the percentage the lower the breastfeeding rates.



## Results: Mother's attitude towards breastfeeding at work and her support at work

	Hazard Ratio* of stopping breastfeeding	95% CI
<b>Attitude towards extracting milk / breastfeeding at work</b>		
No problem	1	
I feel uncomfortable	2.94	(2.40-3.65)
No opinion	2.77	(2.12-3.62)
<b>Is there a room to extract breastmilk / breastfeed?</b>		
Yes	1	
No	1.31	(1.04-1.64)
<b>Is there a refrigerator to store breastmilk?</b>		
Yes	1	
No	1.24	(0.91-1.69)
<b>Length of mother's leave</b>		
14 weeks	1	
16 weeks	1.05	(0.86-1.29)

\*Univariable analyses



## Summary

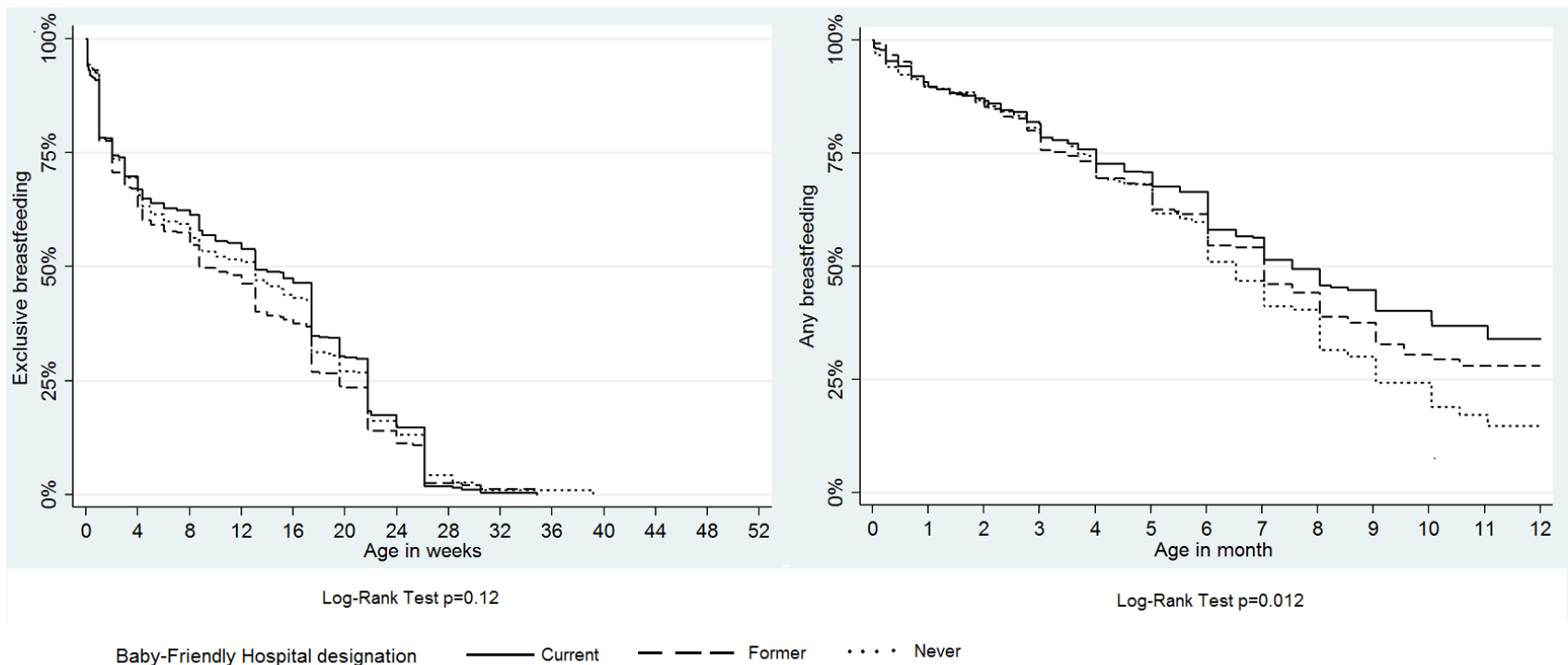
Positive impact on breastfeeding rates and duration

- Fathers who support breastfeeding
- Fathers who are rather supportive in childcare and household
- A good environment at work (room to express milk, refrigerator)

Mothers' and fathers' attitude towards breastfeeding are the most important factors. However, these may be shaped by a supporting environment

# The Baby-Friendly hospital: a supportive environment

Children born in a Baby-Friendly hospital, even if the certification was not renewed, are significantly longer breastfed than children born in hospital, that never implemented the “Ten steps to successful breastfeeding”.



Quelle: Spaeth A. et al. 2017.

## **Best practice examples (projects at Swiss TPH)**

Baby-Friendly Hospitals in Switzerland

<https://www.unicef.ch/de/so-helfen-wir/in-der-schweiz/baby-freundliches-spital>

Continued care after hospital discharge for young families in Switzerland

<https://www.familystart.ch/de.html>

## **and its literature**

The Ten Steps to successful breastfeeding

<http://www.who.int/nutrition/publications/guidelines/breastfeeding-facilities-maternity-newborn/en/>

Neo BFHI

<http://www.ilca.org/main/learning/resources/neo-bfhi>

The impact of BFHI in Switzerland (open access)

<http://onlinelibrary.wiley.com/doi/10.1111/mcn.12497/full>