Prevalence of psychosocial risk factors and identification of suitable recruitment procedures for high-risk families in a German pilot study

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Background

Family dysfunction and child maltreatment as well as subsequent maladaptation occur disproportionately often in families exposed to psychosocial risk. As families' situations are diverse, epidemiological data concerning risk factors and their interactions is needed to design early interventions that meet the specific needs of families in various risk constellations. In Germany, however, there is a paucity of such data.

Consequently, the German National Centre on Early Prevention plans a large-scale national prevalence study on psychosocial risk for families with children from zero to three. In order to identify the optimal strategy for targeting parents exposed to psychosocial risks, two large pilot studies tested a bespoke risk inventory in two different German cities. The risk inventory was delivered by means of two different survey types with the main objective of identifying the best way to motivate people from all social groups to respond to a prevalence study.

EIN FRAGEBOGEN ZUR SITUATION VON FAMILIEN MIT SÄUGLINGEN UND KLEINKINDERN IN DEUTSCHLAND. AUF IHRE UNTERSTÜTZUNG ZÄHLEN WIR!

KiD 0-3
KINDER IN DORTMUND

Method

Pilot studies: In the two comparable German cities Dortmund (1) and Duisburg (2), parents with children aged zero to three were asked to complete a questionnaire on psychosocial risk factors covering the domains family demographics (e.g. poverty, low education or dependence on social welfare), child characteristics (e.g. low birth weight, child unwanted or dysregulation) and family characteristics (e.g. low attachment, parental psychopathology, experienced stress or previous contact with child protection services). The questionnaire includes 84 items and takes about 30 to 45 minutes to complete.

Recruitment was either via (1) registration office data or via (2) pediatricians. For analysis, both samples were compared for various risk factors including child regulatory problems, parental stress, partner conflict, social support and socioeconomic status.

(1) Dortmund

- „Classic" survey design in Germany: registration office data (target sample: about 15,000 children from von 0-36 months)
- All registered children of this age group which were born in Dortmund between 01.01.2011 and 31.12.2013
- Mix of methods:
- Via telephone (CATI), if phone numbers available
- Via self-completion (PAPI) or internet (CAWI) in other cases

(2) Duisburg

- Contact by pediatricians
- Invitation of parents participating in a federal early screening program for infants and young children
- Overall cap at 1,500 participating families
- Self-Completion of the risk questionnaire in pediatricians' practices
- Additional risk assessment provided by pediatricians
- Additional non-responder information provided by pediatricians

Participants and survey types

1) Dortmund
- Conducted telephone interviews: 493
- Self-completion questionnaires via mail: 3,680
- Online questionnaires: 601
- All together 4,656 Participants (= 30 % response rate), thereof 13.8 % fathers

2) Duisburg
- 20 Participating pediatricians (= 61% of eligible pediatricians)
- 1,605 Participating families/completed questionnaires (= 56%), thereof 8.5% fathers
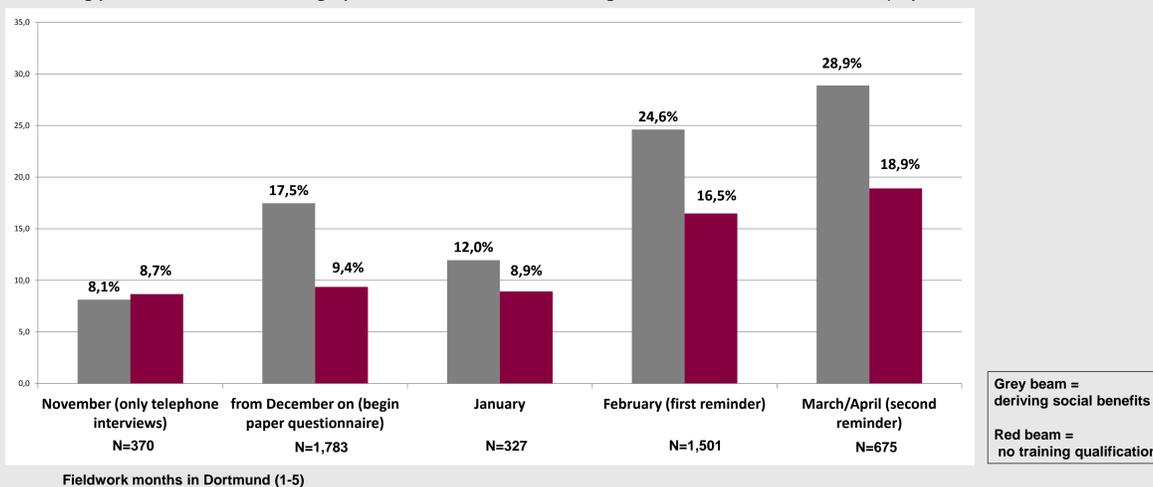- 1,261 Questionnaires about non-responders

Results

Comparison of the two designs

Data analysis is still in progress and will be finished in summer 2014. In the following, first results on demographic deviations and the prevalence of potential risk factors will be presented by contrasting the two pilot samples with their different designs (recruitment (1) via telephone and postal interview or (2) via contact by pediatricians; see above).

Table 1: Comparison of selected basic demographics between the two cities/designs (N= 6,261)

Demographic factor	Official statistics		Prevalence in the study (deviation from official statistics)	
	(1) Dortmund	(2) Duisburg	(1) Dortmund	(2) Duisburg
Proportion of unemployed (03/2014)	14.5	15.3	9.7 (- 4.8)	18.6 (+3.3)
Proportion of foreign nationals (working age population 15-64 12/2011)	19.1	19.9	13,5 (-5.6)	21,0 (+1.1)
Proportion of births by mothers under 20 years of age (2012)	4.0	4.2	1.8 (-2.2)	4.4 (+0.2)
Proportion of births by mothers from 20 - 25 years (2012)	16.8	18.4	9.9 (-6.9)	21.5 (+3.2)

Figure 1: Increasing prevalence of socio-demographic risk factors in different stages of the fieldwork in Dortmund (importance of duration of fieldwork)

	November (only telephone interviews) N=370	from December on (begin paper questionnaire) N=1,783	January N=327	February (first reminder) N=1,501	March/April (second reminder) N=675
Grey beam (deriving social benefits)	8,1%	17,5%	12,0%	24,6%	28,9%
Red beam (no training qualification)	8,7%	9,4%	8,9%	16,5%	18,9%

Grey beam = deriving social benefits

Red beam = no training qualification

Fieldwork months in Dortmund (1-5)

Difficulties with sleeping, crying and feeding

Figure 2: Prevalence in the combined sample
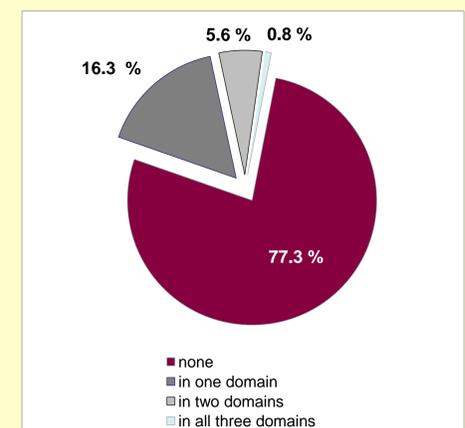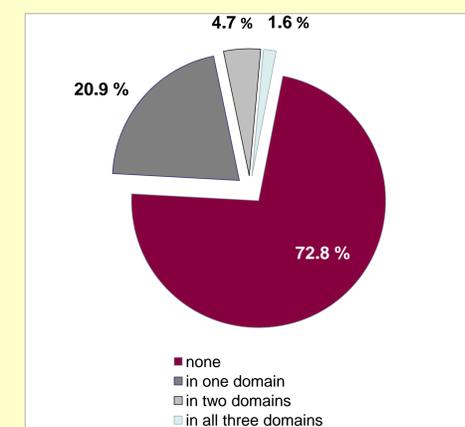(N = 6,047; only indications as "rather" or "highly" burdened with these difficulties)

- 77.3 %
- 16.3 %
- 5.6 %
- 0.8 %

- none
- in one domain
- in two domains
- in all three domains

Figure 3: Only respondents without school leaving certificate (N = 191)

- 72.8 %
- 20.9 %
- 4.7 %
- 1.6 %

- none
- in one domain
- in two domains
- in all three domains

No differences in response patterns of young parents or unemployed respondents found.

Conclusion

Comparison of designs
Both designs proved to be feasible, succeeding in reaching all demographic groups with some differences in detail. In Dortmund (via registration office data) there is an underrepresentation of potentially burdened families, whereas in Duisburg (via pediatricians) a slight overrepresentation was observed (but also a rather high in-questionnaire drop out rate of about 20%). In addition, the importance of acceptably long duration of fieldwork is shown.

Incidence of early infantile regulation difficulties
There is a stable proportion of difficulties with babies' regulation for different groups (combined sample; young parents < 25, < 20 and < 18 years; unemployed parents) of about 16% in one and about 7% in two or more domains (sleeping, crying or feeding). Among respondents without school leaving certificate these numbers are slightly higher (about 20% and 7% respectively), but twice as high for those with difficulties in all three fields.