# Indsamling af kvantitative data til belysning af familier

Eksempler og overvejelser

- Hvad er forventet effekt hos familien
- Er familiefunktion en statisk størrelse
- Hvad skal main outcome være



# At måle på familiefunktion

#### Eksempel:

Scand J Caring Sci; 2018; 32; 1447–1457

Konradsen, Dieperink, Lauridsen, Sorknaes, Østergaard

Validity and reliability of the Danish version of the Ice

Expressive Family Functioning and Ice Family

Perceived Support questionnaires



#### **ICE-EFFQ**

- Four multidimensional subscales of family functioning: expressive emotions (4 items), collaboration and problem-solving (5 items), communication (4 items) and behaviour (4 items)
- Scoring på Likert skala fra 1 til 5



### Reliabilitet - præcision

- Originale udgave god internal consistency, Cronbach's alpha coefficient 0.74 - 0.81 - 0.83 - 0.81
- Dansk udgave Chronbach's alpha på de 4 subskalaer
  0.79 0.84 0.84 0.88

Cronbach's alpha Internal consistency  $\alpha \ge 0.9$  Excellent  $0.7 \le \alpha < 0.9$  Good  $0.6 \le \alpha < 0.7$  Acceptable  $0.5 \le \alpha < 0.6$  Poor  $\alpha < 0.5$  Unacceptable



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**Table 4** Distribution of results from the first questionnaire responses from Danish versions of the ICE-EFFQ and the ICE-FPSQ

	Mean	SD	Possible range in score	CI
ICE-EFFQ				
Factor 1: Expressing emotions	16.6	3.11	4 - 20	15.9 – 17.3
Factor 2: Collaboration and problem-solving	19.0	4.4	5 - 25	18.0 – 20.0
Factor 3: Communication	14.8	3.39	4 - 20	14.1 – 15.6
Factor 4: Behaviour	15.7	3.52	4 - 20	14.9 – 16.5
Total score ICE-FPSQ	66.2	12.47	17 - 85	63.4 – 69.0
Factor 1: Cognitive Factor 2: Emotional Total score	16.4 20.9 37.34	5.76 10.52 15.21	5 - 25 9 - 45 14 - 70	15.1 – 17.7 18.6 – 23.3 33.9 – 40.7

ICE-EFFQ, ICE Expressive Family Functioning; ICE-FPSQ, ICE Family Perceived Support; SD, standard deviation; CI, confidence interval.

#### Knowledge Translation in Family Nursing:

Does a Short-Term Therapeutic Conversation Intervention Benefit Families of Children and Adolescents in a Hospital Setting? Findings From the Landspitali University Hospital Family Nursing

**Table 2.** Repeated Measures Analysis of Variance (ANOVA) Over Time (Pre- and Post-tests) of Differences in Means on Perceived Family Support and Family Expressive Functioning Between the Parents (N = 76) Who Were Receiving the Intervention (n = 41; experimental group) and the Parents Who Were Receiving Traditional Care (n = 35; control group)

					0		,			17			
	Pre-test		Post-test		Group			Time			Group x time		
	Mean	SD	Mean	SD	df	F	Þ	df	F	Þ	df	F	p value
Family support (N = 76)													
Cognitive support													
Experimental group $(n = 41)$	11.63	5.60	13.17	6.23									
Control group $(n = 35)$	12.06	5.51	10.57	5.01	(1.74)	0.876	0.354	(1.74)	0.002	0.965	(1.74)	6.742	0.011
Emotional support													
Experimental group $(n = 41)$	20.80	10.09	23.73	10.18									
Control group $(n = 35)$	20.06	8.92	19.69	10.08	(1.74)	1.331	0.252	(1.74)	1.970	0.165	(1.74)	3.282	0.074
Expressive family functioning (N	= 76)				1								
Emotional communication													
Experimental group $(n = 41)$	16.73	2.31	15.85	2.38									
Control group $(n = 35)$	17.34	1.98	17.49	2.16	(1)	6.2 I	0.02	(1)	2.26	0.14	(1)	9.84	0.040
Collaboration and problem solv	ring												
Experimental group $(n = 41)$	20.59	3.07	19.49	3.39									
Control group $(n = 35)$	20.34	3.25	20.8	3.23	(1)	0.71	0.40	(1)	0.68	0.41	(1)	3.99	0.049
Verbal communication													
Experimental group $(n = 41)$	15.41	3.26	14.78	2.98									
Control group $(n = 35)$	15.57	2.60	16.4	2.03	(1)	2.53	0.12	(1)	0.09	0.76	(1)	5.32	0.024
Behavior													
Experimental group $(n = 41)$	15.8	2.45	15.51	2.69									
Control group $(n = 35)$	16.4	2.49	16.83	2.42	(1)	3.10	0.08	(1)	0.11	0.74	(1)	3.15	0.080

What are the benefits of a short therapeutic conversation intervention with acute psychiatric patients and their families? A controlled before and after study

Table 3
Repeated measures analysis of variance (ANOVA) over time on expressive family functioning and well-being between the family members who received the STC-Intervention and family members who received care as usual.

Variables	Pre-test		Post-test		Group			Time			$\textbf{Group} \times \textbf{Time}$		
	Mean	SD	Mean	SD	df	F	p	df	F	p	df	F	p
Family member perspective (	N = 142)												
Expressive family functioning (	total)												
Experimental group $(n = 63)$	65.52	8.71	67.66	11.38									
Control group $(n = 70)$	64.37	10.00	66.91	9.65	1,132	0.351	0.554	1,132	12.320	0.001	1,132	0.091	0.764
Expressive emotions													
Experimental group $(n = 63)$	16.57	2.54	16.87	2.40									
Control group $(n = 66)$	16.26	2.30	16.72	2.34	1,127	0.357	0.551	1,127	4.952	0.028*	1,127	0.235	0.628
Collaboration and problem solv	ing/												
Experimental group $(n = 63)$	19.75	2.78	20.29	2.97									
Control group $(n = 70)$	19.62	3.37	20.19	3.36	1,131	0.745	0.390	1,131	13.765	<0.001*	1,131	1.750	0.188
Communication													
Experimental group $(n = 65)$	14.56	2.92	15.17	3.02									
Control group $(n = 68)$	14.01	3.24	14.31	3.30	1,131	2.077	0.152	1,131	3.727	0.056	1,131	0.436	0.510
Behavior													
Experimental group $(n = 63)$	15.29	2.25	15.99	2.71									
Control group $(n = 69)$	15.78	2.66	15.83	2.54	1,130	0.182	0.670	1,130	3.475	0.065	1,130	2.708	0.102
Well-being													
Experimental group $(n = 66)$	66.09	8.14	66.73	6.33									
Control group $(n = 70)$	67.10	5.80	67.10	5.06	1,134	0.655	0.420	1,134	0.211	0.647	1,134	0.211	0.647

n varies due to missing data.

<sup>\*</sup> p < 0.05.

- Familier med syge børn
- Familier med psykiatrisk sygdom

- Tag jeres egen kliniske kontekst hvad vil formålet være (stige, falde, forblive konstant)?
- Hvad er klinisk relevant?



#### Er familie - familie

Doser og Norup

Brain Inj, 2016; 30(3): 334-342

# Caregiver burden in Danish family members of patients with severe brain injury: The chronic phase

22-item Caregiver Burden (CB) spørgeskema

Fem sub-scales: General Strain, Isolation, Disappointment, Emotional Involvement and Environment. Total Burden beregnes ved at summere mean af alle 22 items. Hvert items scores 1–4 (Not at all, Seldom, Sometimes, Often) og dækker aspekterne caregiver health, psychological well-being, relationship, social network, physical workload and environmental aspects



# Familier med hjerneskade

Table III. Caregiver burden and hours spent caregiving in spouses vs parents.

		Spouses	Parents	Group difference		
		(n = 16)	(n = 19)			
Caregiver burden, Mean (S	SD)					
Total burden		2.56 (0.61)	2.06 (0.70)	0.037		
General strain		2.69 (0.71)	2.33 (0.92)	0.217		
Isolation		2.78 (0.90)	1.74 (0.89)	0.002		
Disappointment		2.57 (0.69)	2.17 (0.83)	0.138		
Emotional involvement		2.58 (0.89)	1.95 (0.75)	0.031		
Environment		1.93 (0.77)	1.56 (0.62)	0.128		
Amount of time spent care;	giving, n (%)	, ,	, ,			
Majority of time	Yes	4 (25.0)	5 (26.3)	0.982		
0–4 hours/week	No	11 (68.8)	14 (73.7)	0.038		
	Missing	1 (6.3)				
	<u> </u>	4 (25.1)	12 (63.1)			
5–12 hours/week		3 (18.8)	3 (15.8)			
> 13 hours/week		7 (43.8)	2 (10.5)			
Don't know			1 (5.3)			
Missing		2 (12.5)	1 (5.3)			

Difference between parents and spouses investigated using independent samples t-tests for interval data and chi-square tests for ordinal and categorical data.

#### Er familiefunktion stabilt over tid?

Translation and field testing of the family functioning, family health and social support questionnaire in Danish outpatients with heart failure

Østergaard, Pedersen, Nørgaard, Jeune

Scandinavian Journal of Caring Sciences 2018

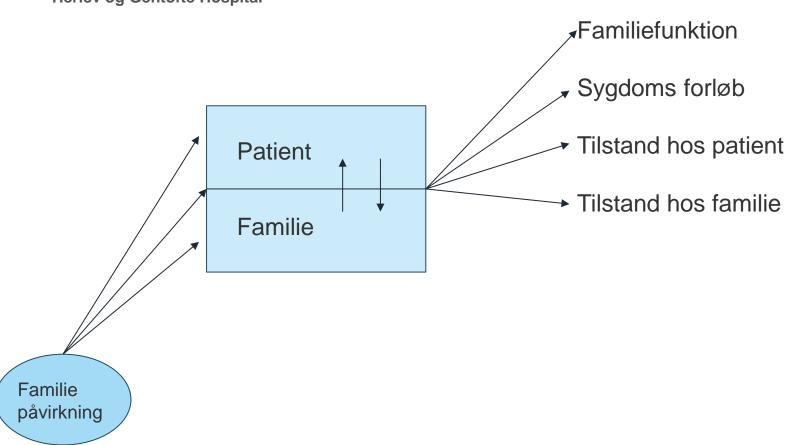
## Her over 15 dage

Test—retest To determine the test—retest reliability, data were available from 27 of the patients who were asked to return the questionnaire within 15 days. Test—retest reliability showed extensive agreement for all three scales with ICC: 0.86 (95% CI: 0.68 to 0.93) for the family functioning scale, ICC: 0.69 (95% CI: 0.31 to 0.86) for the family health scale, and for the social support scale, ICC was 0.83 (95% CI: 0.63 to 0.92) indicating acceptable test—retest reliability.

**Herlev og Gentofte Hospital** 

Hvad har effekt på hvad

og hvad skal vi måle på?



- Østergaard: To evaluate the short-term (3 months) effects of family nursing therapeutic conversations (FNTC) on health-related quality of life, self-care and depression in outpatients with Heart failure (HF).
- Højager: The effect of family-authored diaries on posttraumatic stress disorder in intensive care unit patients and their relatives: A randomised controlled trial (DRIP-study)
- Venema: The impact of family nursing conversations on the experienced functioning of a surgical patient in terms of the international classification of functioning, disability and health
- Konradsen: The effect of nurse-mediated stress alleviating mobile application on caregiver burden among carers of persons with dementia



Patient

Familie

Familie

Familiefunktion Sygdoms forløb ilstand hos patient

Tilstand hos familie

#### Hvis vi så vil måle en effekt hos familien

Er det så familiefunktion?

Er det family ressilience

Family Ressilience questionnaire (Faccio et al 2019)

Resilience is a multifaceted concept that can be described as the ability to mobilise resources and to adapt to challenging or adverse situations. According to the family systems theory, a change or a perturbation occurring to one member of the system will affect also the other members, which may result in a smooth adaptation to a new homeostasis or in difficulties that prevent the readjustment process...... resilience may represent a pivotal concept to analyse and support the family in moving towards a new balance and in constructing meaning

- Family cohesion: Family cohesion has been defined as the emotional bonding that family members have toward one another
- Eller ?



Quick, simple measures of family relationships for use in clinical practice and research. A systematic review Pritchett et al *Family Practice*, 2011

There are challenges facing those who use self-report family functioning measures. These include the question of how effective family functioning measures are at examining the family level, rather than the individual level, and whether averaging individual family members' scores to gain an overall score is valid.



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