What Determines the Level of Social Support in Parents with Small Children?

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Abstract: Children's as well as parents' health may depend on whether the parents receive adequate support from their social network. The purpose of this study was to investigate whether family chacteristics like the number and age of the children, and parental age, education and civil state are related to the level of social support in parents with small children. 1046 parents bringing their children for well-child visits at maternal and child health centres in Oslo, Norway, filled in a questionnaire. The parents who perceived little support, were more likely to be older, to have short education, to have several children, and less likely to have a child aged less than one year.

In Norway, public resources transferred to young families have so far been canalized primarily to families with a newborn child. Families with a newborn child have been given priority not only because of the need for frequent pediatric screening and vaccinations, but because of the need for support as well. In the future, more attention should be paid to families without a newborn child, and to families with several children and relatively old parents.

Zusammenfassung: Was bestimmt das Ausmaß der sozialen Unterstützung bei Eltern mit kleinen Kinder? Die Gesundheit von Kindern und Eltern kann davon abhängen, ob die Eltern durch ihr soziales Netzwerk ausreichende Unterstützung erhalten. Die Absicht dieser Studie war es zu untersuchen, ob Familienmerkmale wie Zahl und Alter der Kinder, Alter der Eltern, Niveau der Erziehung und des bürgerlichen Status' in systematischem Zusammenhang zum Ausmaß der sozialen Unterstützung bei Eltern mit kleinen Kindern stehen. 1046 Eltern, die ihre Kinder zu Gesundheitsuntersuchungen an den Mutter-Kind-Gesundheitszentren in Oslo in Norwegen brachten, füllten einen Fragebogen aus. Geringe soziale Unterstützung erhielten die Eltern, die älter waren, eine kürzere Ausbildung hatten, mehrere Kinder hatten und kein Kind unter einem Jahr hatten.

In Norwegen richteten sich die öffentlichen Bemühungen besonders auf junge Familien mit einem neugeborenen Kind. Familien mit einem neugeborenen Kind wurde Priorität gegeben, nicht nur hinsichtlich kinderärztlicher Untersuchungen und Impfungen, sondern überhaupt der allgemeinen Unterstützung. In Zukunft sollte man mehr auf die Familien ohne neugeborenes Kind achten und ebenso auf Familien mit mehreren Kindern und relativ alten Eltern.

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Introduction

Children's as well as parents' health may depend on whether the parents receive adequate and appropriate support from their social network. Social support, which have been defined as the experience that one "is cared for and loved, esteemed, and a member of a network of mutual obligations", seems to be a buffer versus negative life events^{2–8}. Persons with low levels of social support more often have psychiatric symptoms^{2–4,7}. Psychiatric symptoms in parents are associated with unsatisfactory growth and increased physical and psychiatric morbidity among the children^{9–12}.

Some studies indicate that parenthood may influence the level of social support^{7,13,14}. Ishii-Kuntz et al. found that parents of younger children had less support from their spouse than childless people¹⁴. On the other hand, Hammer found that playgrounds, local parks and kindergartens link parents to other parents, providing a new social network¹³. To what extent the number and age of the children influence the level of social support, is not known.

Although some studies on young and middle-aged people have shown a negative correlation between the subjects' age and the level of social support, this association is not consistent, and seems to depend on which aspects of support that are studied^{7,15-18}.

Several studies have shown a positive correlation between social status and the level of social support^{7,19-21}. Hanson and Østergren¹⁹ found that social support were higher in men living with a woman than in men living alone. However, these studies are not necessarily representative for parents with small children. One should also keep in mind that the high number of different social support measures in use, is a problem comparing investigations on social support.

The purpose of this study was to investigate, in a sample of parents with small children, how the level of social support is related to the number and age of the children, and to parental age, civil state and educational level.

Materials and Methods

The mother or father of 1071 children attending 6-weeks, 2-, or 4-year well child visits at seven maternal and child health-centres in Oslo, Norway, were during 1993 consecutively invited to complete a questionnaire. Only parents with Norwegian as mother tongue were included. If a child was accompanied by both parents, the mother was asked to complete the questionnaire. 1046 parents (98%) consented to participate in the study.

The parents filled in the questionnaire before the visit with the health visitor. The parents were informed that the completed questionnaire would be read by the health visitor, but would not be kept in the record. The questionnaire contained items on smoking behaviour as well as demographic characteristics and social support.

Age, educational level and civil state (lives alone or has a spouse/co-habitee) of the parent were recorded, as well as the number and age of all her/his children.

Social support was in this study seen, in agreement with Cobb's definition¹, as a subjective experience. It was measured by a set of four questions developed by professor Tom Sørensen at the Department of psychiatri, University of Oslo.

Three of the questions are operationalizations of Cobb's original three components of social support¹: being "cared for and loved", "esteemed", and "a member of a network of mutual obligations". In addition, there is one question measuring the expectancy of tangible support in a given, common situation. The theoretical basis for including this question comes from the works of Weiss²².

The parents were asked to rate on a scale from one to five: a) To what extent they felt having someone near being warm, attentive and interested in what they were doing. b) How they felt that they were valued by their friends. c) How probable it was that they would receive necessary help from family, friends or neighbours if they were ill and confined to bed for a long time, d) To what extent they had a feeling of belonging to a group of people with shared interests and mutual trust in each other. The index is the mean of the four items.

Two studies in Norway have shown that this set of questions differentiate well between individuals, and in relation to psychiatric symptoms shows buffer effect versus negative life events as well as main effect² (and Sandanger / unpublished results), The internal reliability, measured by the standardized item alpha (Cronbach's alpha) based on data from our study, was 0.64.

The following statistical procedures were used: Reliability analysis, Mann-Whitney test, Kruskal-Wallis test, Multiple logistic regression. A significance level of 5% was used.

Results

90% (n = 940) of the reporting parents were women. Other demographic characteristics are shown in a table below (Table 4).

The social support scores are presented in Table 1. The distribution of the index-values gave a natural basis for division of the parents into three groups: High support (Index 1.000-1.500; n = 709), Medium support (Index 1.666-2.000; n = 230), Low support (Index > 2.000; n = 105).

Table 1. The level of social support (scores) in the parents (N = 1046). The highest level is 1. The figures are percentages.

Type of support	Level					
	1	2	3	4	5	Missing
Warmth, attention and						
interest from a close person	71.6	25.1	1.6	0.2	0.0	1.4
Valued by friends	31.5	29.9	31.5	4.3	0.5	2.3
Belonging to a group						
with shared interests	73.4	23.3	1.3	1.0	0.1	0.9
Necessary help if ill	77.7	14.6	5.5	1.1	0.6	0.4

Parents with long education felt they were more respected by friends (Kruskal-Wallis; Tied p < 0.05), felt more warmth, attention and interest from a close person (p < 0.05) and felt more support in general (index) than parents with a short education (p = 0.01).

Single parents were less inclined to feel that they belonged to a group of people with shared interests and mutual trust than parents who had a spouse/co-habitee (Mann-Whitney; Tied p < 0.05). There was no significant association between civil state and other forms of support or social support in general.

Parental age was negatively correlated to the general level of social support (Kruskal-Wallis; Tied p < 0.01), to being valued by friends (p < 0.01), to anticipated help if ill (p < 0.01) and to belonging to a group of people with shared interests (p = 0.05), but not to the level of warmth, attention and interest from a close person.

The relationship of social support to having a child aged less than one year (infant) and to the number of children is presented in Table 2 and Table 3.

Table 2. The level of social support in parents with and without an infant. The figures are mean ranks. Higher rank means less support.

Type of social support	With infant $(N = 524)$	Without infant (N = 520)	P-value*
Index	466	578	< 0.0001
Warmth, attention and			
interest from a close person	481	551	< 0.0001
Valued by friends	466	557	< 0.0001
Belonging to a group with			
shared interests	496	541	< 0.01
Necessary help if ill	500	542	< 0.01

^{*} Tied P-value from Mann-Whitney test.

Table 3. The level of social support in the parents by the number of children in the family. The figures are mean ranks. Higher rank means less support.

Type of social support		P-value*		
	1	2	≥ 3	
	(N = 548)	(N=388)	(N = 107)	
Index	488	550	583	< 0.0001
Warmth, attention and				
interest from a close person	496	531	555	< 0.05
Valued by friends	480	531	595	0.0001
Belonging to a group				
with shared interests	511	525	529	ns
Necessary help if ill	502	539	549	< 0.05

^{*} Tied P-value from Kruskal-Wallis test.

The frequency of low social support in general (index > 2.00) in subgroups of parents is presented in Table 4. An increased frequency of low support was found in parents older than 34 years, parents without an infant, and parents with more than one child. The frequency of low support by age and having an infant is illustrated in Fig. 1.

Table 4. The frequency of low social support (index > 2.00) by the parents' demographic characteristics.

Variables	n	% with low support	P-value
Age of the parent			
18–24	123	4	
25–34	738	9	
35–	169	20	< 0.0001
Have an infant (< 1 year)			
Yes	524	7	
No	520	13	< 0.001
Number of children			
1	548	7	
2	388	13	
3 or more	107	16	< 0.01
Have a spouse/co-habitee			
No	134	13	
Yes	908	10	ns
Educational level (years)			
-9	79	10	
10–12	509	11	
13–16	378	10	
17–	71	7	ns
Are 35 years or more and do not have an infant	118	22	
Are 35 years or more and have 3 children or more	46	28	
The whole sample	1046	10	

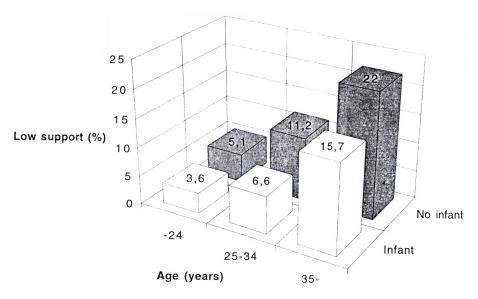


Fig. 1. The frequency of low support (index > 2.00) by age and having an infant.

Table 5. Factors which predicted that the parents perceived medium/low support (index) in contrast to high support. Results of logistic regression.

Variables	n	n OR (95% CI)	
Infant in the family			
Yes (Ref. cat.)	510		
No	504	2.02 (1.52–2.68)	< 0.0001
Number of children			
1 (Ref. cat.)	536		
2	375	1.46 (1.09–1.97)	< 0.05
3 or more	103	1.88 (1.19–2.99)	< 0.01
Age of the parent			
18-24 (Ref. cat.)	121		
25–34	727	1.38 (0.86–2.23)	0.18
35–	166	1.87 (1.05–3.32)	< 0.05
Have a spouse/co-habitee			
No (Ref. cat.)	127		
Yes	887	0.96 (0.63–1.45)	0.84
Educational level (years)			
-9	74	1.94 (0.92–4.10)	0.08
10–12	499	1.77 (0.98–3.18)	0.06
13–16	371	1.35 (0.74–2.45)	0.33
17- (Ref. cat.)	70	` '	

In a logistic regression, medium/low social support in contrast to high support was significantly related to not having an infant, having more than one child and to being older than 34 years (Table 5). A logistic regression with low support in contrast to high/medium support showed following relations to low support: being older than 34 years (OR = 4.58; 95% CI: 1.64–12.80; p < 0.01), not having an infant (OR = 1.65; 1.06–2.57; p < 0.05), having two children (OR = 1.76; 95% CI: 1.11–2.79; p < 0.05) and having three or more children (OR = 1.77; 95% CI: 0.91–3.41; p = 0.09).

Discussion

Methodology

The social support measure used in this study is developed on the basis of classical social support theory. Although it comprises only four questions, and therefore may not have embraced all shades of social support, it has in two studies² (and Sandanger/unpublished results) given sense to variations in the frequency of psychiatric symptoms, as expected from social support theory, and in agreement with a large number of other studies. Test-retest reliability is so far unknown, but internal reliability is acceptable.

The parents may have had a tendency to report the socially most desirable, and as a result of this overestimate the level of social support. This may have drawn a too optimistic picture of the general level of social support. However, we expect

that the possible overestimation of social support is not correlated to other variables studied here, and therefore only to a small extent have influenced statistical relations between these variables and social support.

There are two important groups of families which have not been included in this study: families who do not attend the well-child centres regularly, and families in which the parents are immigrants or refugees. We have little knowledge of these two groups of families, but our impression from clinical work is that a relatively large proportion of the parents have psychosocial problems and are in need of more support. In relation to the population of parents who have Norwegian as mother tongue, and who bring their children for well child visits, we expect selection bias to be a small problem in our study.

The General Level of Social Support

The results suggest that lack of support is not a widespread problem among parents attending maternal and child health-centres in Oslo. We have compared the scores in our material with the scores of a random sample of parents with preschool-children, living in Oslo and Lofoten (a district in northern Norway) (Sandanger/unpublished results). 22% of the parents in the other study had a social support index of 2.50 or more compared to 6% of the parents in the present study. One explanation of the difference in levels of social support between the two samples of parents may be that our sample had a considerably higher proportion of young parents with an infant, and did not comprise parents not attending well-child visits or parents not having Norwegian as mother tongue. Another explanation may be different modes of administration of the questionnaires. In both studies, the reports given by the parents could be read by a person shortly after the parents had completed the questionnaire. However, in the other study this person was a professional interviewer, while in the present study the person was the health-visitor.

Determinants of the Level of Social Support

The results of this study indicate that parents with an infant are inclined to perceive higher support than parents with only older children. One explanation may be that a newborn child is a signal for the social network to back up the parents. Another explanation may be that the baby itself, through its helplessness and through being a "unique product", gives the parents a feeling of being important and a feeling of pride and joy which may be reflected in the parents' psychological state and perception. Finally, to have an infant may be a source of intimacy to breastfeeding mothers. With time these effects may fade.

The results indicate that with increasing number of children, the parents are less inclined to perceive warmth, attention and interest from a close person, less inclined to feel that they are valued by their friends and less confident that they will receive necessary help if they get ill and confined to bed.

One explanation may be that the caring for children increases the parents' own needs of support and at the same time gives parents less time and energy to cultivate their relationships to spouse and friends. To have many children probably

accentuates these factors and reflects that they have been effective for several years.

A low level of support experienced by parents with several children could explain the finding of Brown and Harris that having several children is a risk factor for becoming depressed when exposed to negative life events⁷.

Our study indicates that the youngest parents perceive higher social support than the oldest ones, even after controlling for the number of children. High age seems to be the strongest predictor of low social support in general. One explanation may be that the youngest parents more often have a mother or a father who are capable of giving help, and that the youngest parents still have contact with their friends from the adolescence. Another explanation may be that older parents have less endurance, and therefore more often are in need of support.

It is a remarkable finding that single parents in our study differ very little from parents with a spouse/co-habitee with respect to the level of perceived support. This suggests that many single parents do have a satisfactory network in their friends and own parents.

Parents with a low educational level had lower social support than parents with a high educational level. However, multivariate analyses showed that short education was hardly an independent risk factor for low support in this study.

Practical Implications

The low number of parents perceiving low social support implicates, first of all, that it may be practicable to help the limited number of parents with inadequate support. Moreover, it implicates that social interventions aiming at "cases" selected by screening, may be more cost-beneficial than general measures.

In Norway, public resources transferred to young families have so far been canalized primarily to families with a newborn child through frequent well-child visits, postpartum support groups and paid maternity leaves. Families with a newborn child have been given priority not only because of the need for frequent pediatric screening and vaccinations, but because of the need for support as well. The results of this study should direct our attention to families without a newborn child, and to families with several children and relatively old parents. 2-year- and 4-year well child visits may be golden opportunities for screening parents for psychosocial problems, and for bringing in practical assistance, contact persons and parental support groups.

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