RESEARCH REPORT

# Does financial strain explain the association between children's morbidity and parental non-employment?

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**Objectives:** To investigate whether family financial resources explain the association between parental labour market participation and children's health in families in Denmark and Sweden.
**Design:** Parent reported questionnaire data from the survey of health and welfare among children and adolescents in the Nordic countries, 1996.
**Participants:** 4299 children aged 2–17 years.
**Measures:** Three indicators measured children's health: recurrent psychosomatic symptoms, chronic illness, and prescribed medicine. Four variables and a composite index were used to measure family financial resources. The variable on family labour market participation consisted of five groups according to family type and parents' labour market participation.
**Results:** Children in families with one or both parents without paid work had an increased prevalence of recurrent psychosomatic symptoms (odds ratio from 1.52 to 3.20) and chronic illnesses (odds ratio from 1.43 to 2.25), whereas the use of prescribed medicine did not differ (odds ratio from 0.67 to 1.15). The five indicators on family financial resources only slightly reduced the odds ratios for recurrent psychosomatic symptoms (odds ratio from 1.12 to 2.75) and chronic illnesses (odds ratio from 1.34 to 2.22), and the odds ratios for children's use of prescribed medicine remained unchanged and non-significant (odds ratio from 0.62 to 1.18).
**Conclusions:** Financial strain associated with non-employment does not explain the increased prevalence of health problems among children in families affected by non-employment in Denmark and Sweden. However, the associations between family labour market participation and children's health differ according to family financial status.

Children in families affected by non-employment have more health problems.[1–12] Non-employment is not equally distributed among social classes, different family types, or groups of immigrant status or race.[13 14] Nevertheless, non-employment adversely affects children's health in all groups.[11] The knowledge about the mechanisms and pathways of these associations is less clear.[6 13 15] Some agreement exists, however, that the consequences of parental non-employment on children's health and wellbeing could be mediated primarily through financial strain on the family and probably depression and stress experienced by the parents.[6 13 16–18] The experience of non-employment is likely to be multifaceted and involve different processes, moderating influences, and outcomes. An attempt should at least be made to separate the effects of financial strain from the other effects of non-employment.[14 19] Furthermore, most of these studies have been conducted in England and the United States. Denmark and Sweden are associated with a model of welfare policy characterised by a general, solidary, and universal nature of social legislation: the state redistribution welfare model.[20] This implies, among other things, that access to the healthcare system does not differ according to labour market participation and social benefits are comparatively high. The proportions of men and women in the labour force are high in both these countries. Financial strain may be less important in countries with high social benefits. In Denmark and Sweden, about one third of single mothers are non-employed. However, a relative high proportion of single mothers in paid work earn as much as or less than unemployment benefits.[21] Measuring financial strain is not easy and must be adapted to the society studied. A variety of proxies and measures has been proposed in the literature.[8 13]

We aimed to investigate whether family financial resources explained the association between parental labour market participation and children's health. Families in Denmark and Sweden were investigated.

## METHODS

### Participants

Parent reported data were used from the survey on health and welfare among children and adolescents in the Nordic countries, 1996, a cross sectional study of random samples of children and their families in the Nordic countries.[22] We used data from Denmark and Sweden. A random sample of about 3000 children aged 2–17 years was drawn from the population registers of the respective national bureaus of statistics in Denmark and Sweden. Children living in institutions were excluded. The response rate in Denmark was 68.6% (n = 2169) and in Sweden 69.0% (n = 2130).

### Non-response analysis

In Denmark, respondents and non-respondents were compared by registry data on the following variables: the age of the child and the parents, the gender of the child, family size and structure, and the parents' native country, education, and profession. The following groups were overrepresented among non-respondents: children older than 14 years, mothers and fathers younger than 25 years or older than 50 years, parents with little education, unskilled workers or not in paid work, single parent families, families with more than three children younger than 18 years, and families with no parent born in Denmark. In Sweden, modified non-response analysis was done by comparing respondents with

information from national registries on all children aged 2–17 years. In Sweden, the items mentioned above did not differ significantly between respondents and the general population. Nevertheless, the pattern was comparable to that of Denmark.

### Outcome measures

We used three indicators to measure children's health. Recurrent psychosomatic symptoms were defined as a parent reporting at least one moderate or severe symptom at least every two weeks. The checklist included: stomach pain, headache, back pain, sleep disorders, dizziness and loss of appetite and ''other (please specify)''. Chronic illness was defined as a parent reporting at least one moderate or severe chronic illness or disability that had considerably affected the child's daily life during at least three of the past 12 months. The checklist included: diabetes, visual impairment, hearing impairment, speech defect, mental disorder, epilepsy, gastric disorder, asthma, allergies, eczema, physical disability, overweight and hyperactivity and ''other (please specify)''. Prescribed medicine was defined as a parent reporting the child's actual use of prescribed medicine.

**Table 1** Prevalence of recurrent psychosomatic symptoms, chronic illness, and use of prescribed medicine among participating children. Percentages of children grouped according to family labour market participation and family financial resources. In a sample of 4299 Danish and Swedish children

| Outcome measures | Number | % |
|---|---|---|
| **Recurrent psychosomatic symptoms** | | |
| Symptom | 313 | 7.3 |
| No symptom | 3933 | 91.5 |
| Misssing | 53 | 1.2 |
| **Chronic illness** | | |
| Chronic illness | 551 | 12.8 |
| No chronic illness | 3627 | 84.4 |
| Missing | 121 | 2.8 |
| **Prescribed medicine** | | |
| Medicine | 563 | 13.1 |
| No medicine | 3686 | 85.7 |
| Missing | 50 | 1.2 |
| **Family labour market participation** | | |
| Two parents with paid work | 3010 | 70.0 |
| Single parent with paid work | 373 | 8.7 |
| Two parents, one with paid work | 575 | 13.4 |
| Two parents without paid work | 174 | 4.0 |
| Single parent without paid work | 142 | 3.3 |
| Missing | 25 | 0.6 |
| **Family financial resources** | | |
| Income | | |
| High | 2698 | 62.8 |
| Low | 901 | 21.0 |
| Missing | 700 | 16.3 |
| Cash margin | | |
| Yes | 2986 | 69.5 |
| No | 1178 | 27.4 |
| Missing | 135 | 3.1 |
| Difficulties in paying running expenses | | |
| No | 3110 | 72.3 |
| Yes | 1099 | 25.6 |
| Missing | 90 | 2.1 |
| Satisfaction with finances | | |
| Satisfied | 3296 | 76.7 |
| Neither satisfied nor dissatisfied or dissatisfied | 919 | 21.4 |
| Missing | 84 | 2.0 |
| Family finances scale | | |
| 0 financial complaints | 1777 | 41.3 |
| 1 financial complaint | 949 | 22.1 |
| 2 or more financial complaints | 812 | 18.9 |
| Missing | 761 | 17.7 |

### Family labour market participation

Each parent was categorised according to labour market participation: with or without paid work. A parent without paid work for at least six months was classified as being without work (non-employed). Parents without paid work were a mixed group, especially the women. The group consisted of unemployed people, people on long term sick leave from illness, people awarded an anticipatory (disability) pension, people in an educational programme, and homemakers. The variable on family labour market participation consisted of five groups: two parent family, both parents with paid work; single parent with paid work; two parent family, one parent with paid work; two parent family, both parents without paid work; single parent without paid work.

### Potential confounding variables

The potential confounding variables included in the analyses were: country (Denmark and Sweden), gender of the child, and age of the child (2–6 years, 7–12 years, and 13–17 years).

### Family finances

Household equivalent income was calculated by dividing the disposable income of the family by the household size. The OECD equivalent scale was used.[23] For analysis, this calculated income was dichotomised as the lowest quartile compared with the rest. Their cash margin was whether they could raise DKK/SEK 14 ?000 (about US$ 2000) within one week. They were asked whether they had difficulties in paying running expenses for food, rent, etc, during the past 12 months. The respondents' satisfaction with the family finances was dichotomised as satisfied compared with neither satisfied nor dissatisfied or dissatisfied. A family finances scale was constructed as a composite index based on these four items on family finances. The children were grouped into three categories: (1) no financial complaints; (2) one financial complaint; (3) two or more financial complaints.

### Statistical analysis

We used logistic regression separately for each of the three outcome measures. The measure for family labour market participation and the potential confounding variables were included in the statistical model simultaneously. The measures for family financial resources were included one by one. All tests for interaction effect were conducted by introducing the interaction terms one by one. The Hosmer-Lemeshow goodness of fit test was conducted for all models analysed with logistic regression.

## RESULTS

Key information about the children and their parents is shown (table 1). Some 7.4% of the children had one or more recurrent psychosomatic symptom, 13.2% had one or more chronic illness, and 13.3% used prescribed medicine. The table also shows the participating children distributed according to the variables on family labour market participation and family financial resources.

In logistic regression models, with family labour market participation as the explanatory variable and as dependent variable recurrent psychosomatic symptoms, chronic illness, and prescribed medicine, respectively (table 2), children in two parent families in which both parents had paid work had the lowest prevalence of recurrent psychosomatic symptoms and chronic illness and children with a single parent without paid work had the highest prevalence. Children in the remaining three groups had intermediate prevalence rates for recurrent psychosomatic symptoms and chronic illness, and there was a gradient for both outcome measures: decreasing family labour market participation was associated

**Table 2** Adjusted odds ratios (95% confidence intervals) for recurrent psychosomatic symptoms, chronic illness, and prescribed medicine in a sample of 4299 Danish and Swedish children classified according to their parents' labour market participation

| | Recurrent psychosomatic symptoms | Chronic illness | Prescribed medicine |
|---|---|---|---|
| Family labour market participation | p<0.001 | p<0.001 | NS |
| Two parents with paid work | 1.00 | 1.00 | 1.00 |
| Single parent with paid work | 1.52 (1.04 to 2.21) | 1.47 (1.09 to 1.99) | 0.86 (0.62 to 1.19) |
| Two parents, one with paid work | 1.67 (1.21 to 2.33) | 1.43 (1.10 to 1.85) | 0.98 (0.75 to 1.28) |
| Two parents without paid work | 2.02 (1.22 to 3.35) | 1.76 (1.18 to 2.63) | 0.67 (0.40 to 1.13) |
| Single parent without paid work | 3.20 (1.98 to 5.19) | 2.25 (1.49 to 3.42) | 1.15 (0.71 to 1.85) |

The measure for family labour market participation and the potential confounding variables (gender and age of the child) were included in the statistical model simultaneously. The p values refer to the inclusion of the variable family labour market participation in the statistical model. NS, not significant.

with increasing prevalence of recurrent psychosomatic symptoms and chronic illness. The groups did not differ in actual use of prescribed medicine.

All variables measuring family financial resources were associated with the prevalence of recurrent psychosomatic symptoms. Four of the five variables on family financial resources were associated with the prevalence of chronic illness. Only one variable was associated with the prevalence of use of prescribed medicine (table 3). All associations showed increased health problems among children living in families with less financial advantage.

In logistic regression analysis with family labour market participation as the independent variable, the potential mediating variables on family financial resources were introduced in the statistical model one at a time (table 4). The odds ratios for recurrent psychosomatic symptoms among children were only modestly reduced and still significantly increased for children in families with one or both parents without paid work compared with two parent families with both parents in paid work. The odds ratios for chronic illness among children grouped according to family labour market participation were only slightly reduced and remained significantly increased among children in single parent families and families with one or two parents without paid work compared with two parent families with paid work. The odds ratios for children's use of prescribed medicine were largely unchanged and remained non-significant.

The confounding variables country and the gender and age of the child did not significantly interact with family labour market participation. Difficulties in paying running expenses and family labour market participation interacted significantly in the statistical models with recurrent psychosomatic symptoms ($p = 0.05$) and actual use of prescribed medicine ($p = 0.01$) as outcome measures. Logistic regression analysis was performed stratified according to responses to the variable difficulties in paying running expenses (table 5). The odds ratios for recurrent psychosomatic symptoms differed significantly for children in families with one or both parents without paid work according to the difficulties in paying running expenses. In families without difficulties in paying running expenses the prevalence of recurrent psychosomatic symptoms in children increased with a decreasing participation of parents in the labour market. The odds ratios for the actual use of prescribed medicine also differed according to the difficulties in paying running expenses. In families without difficulties in paying running expenses, children in families experiencing non-employment used less prescribed medicine than did children in families with paid work. In contrast, within families with difficulties

**Table 3** Adjusted odds ratios (95% confidence intervals) for recurrent psychosomatic symptoms, chronic illness, and prescribed medicine in a sample of 4299 Danish and Swedish children classified by level of family financial resources

| Family financial resources | Recurrent psychosomatic symptoms | Chronic illness | Prescribed medicine |
|---|---|---|---|
| **Income** | p<0.001 | NS | NS |
| High | 1.00 | 1.00 | 1.00 |
| Low | 1.84 (1.40 to 2.42) | 1.19 (0.95 to 1.48) | 0.94 (0.75 to 1.18) |
| **Cash margin** | p<0.001 | p<0.01 | NS |
| Yes | 1.00 | 1.00 | 1.00 |
| No | 1.99 (1.56 to 2.53) | 1.39 (1.14 to 1.68) | 1.16 (0.95 to 1.41) |
| **Difficulties in paying running expenses** | p<0.001 | p<0.001 | p=0.05 |
| No | 1.00 | 1.00 | 1.00 |
| Yes | 2.07 (1.62 to 2.65) | 1.45 (1.19 to 1.76) | 1.22 (1.00 to 1.48) |
| **Satisfaction with finances** | p<0.001 | p=0.05 | NS |
| Satisfied | 1.00 | 1.00 | 1.00 |
| Neither satisfied nor dissatisfied or dissatisfied | 1.82 (1.40 to 2.35) | 1.24 (1.00 to 1.53) | 1.12 (0.91 to 1.39) |
| **Family finances scale** | p<0.001 | NS | NS |
| 0 financial complaints | 1.00 | 1.00 | 1.00 |
| 1 financial complaint | 1.39 (1.00 to 1.93) | 1.10 (0.86 to 1.40) | 0.86 (0.67 to 1.09) |
| 2 or more financial complaints | 2.30 (1.69 to 3.13) | 1.31 (1.02 to 1.66) | 1.02 (0.80 to 1.29) |

The five measures on family financial resources were included in the statistical model one by one. The potential confounding variables (gender and age of the child) were included in all statistical models simultaneously. The p values refer to the inclusion of the variable on family financial resources in the statistical model. NS, not significant.

**Table 4** Adjusted odds ratios (95% confidence intervals) for recurrent psychosomatic symptoms, chronic illness, and prescribed medicine for each of the five measures on family financial resources in a sample of 4299 Danish and Swedish children

| | Family financial resources | | | | |
|---|---|---|---|---|---|
| | **Household income** | **Cash margin** | **Running expenses** | **Satisfaction with finances** | **Family finances scale** |
| **Recurrent psychosomatic symptoms** | p<0.001 | p<0.01 | p<0.01 | p<0.001 | p<0.05 |
| Two parents with paid work | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Single parent with paid work | 1.44 (0.99 to 2.11) | 1.31 (0.89 to 1.93) | 1.30 (0.89 to 1.91) | 1.38 (0.94 to 2.02) | 1.12 (0.72 to 1.74) |
| Two parents, one with paid work | 1.52 (1.09 to 2.13) | 1.51 (1.08 to 2.11) | 1.48 (1.06 to 2.08) | 1.56 (1.12 to 2.17) | 1.35 (0.92 to 2.00) |
| Two parents without paid work | 1.71 (1.01 to 2.88) | 1.73 (1.03 to 2.91) | 1.72 (1.02 to 2.90) | 1.78 (1.06 to 2.98) | 1.88 (0.97 to 3.64) |
| Single parent without paid work | 2.75 (1.68 to 4.51) | 2.41 (1.46 to 3.99) | 2.51 (1.53 to 4.13) | 2.70 (1.65 to 4.44) | 2.23 (1.21 to 4.10) |
| **Chronic illness** | p<0.001 | p<0.001 | p<0.001 | p<0.001 | p<0.05 |
| Two parents with paid work | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Single parent with paid work | 1.47 (1.09 to 1.99) | 1.40 (1.03 to 1.96) | 1.39 (1.02 to 1.88) | 1.45 (1.07 to 1.97) | 1.45 (1.04 to 2.01) |
| Two parents, one with paid work | 1.42 (1.10 to 1.85) | 1.38 (1.06 to 1.78) | 1.36 (1.05 to 1.77) | 1.41 (1.09to1.83) | 1.34 (1.00 to 1.79) |
| Two parents without paid work | 1.72 (1.13 to 2.61) | 1.66 (1.10 to 2.51) | 1.73 (1.15 to 2.60) | 1.76 (1.17 to 2.66) | 1.70 (0.98 to 2.97) |
| Single parent without paid work | 2.22 (1.46 to 3.40) | 2.04 (1.33 to 3.14) | 2.08 (1.36 to 3.17) | 2.21 (1.45 to 3.38) | 1.70 (0.99 to 2.93) |
| **Prescribed medicine** | NS | NS | NS | NS | NS |
| Two parents with paid work | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Single parent with paid work | 0.86 (0.61 to 1.19) | 0.81 (0.58 to 1.14) | 0.81 (0.58 to 1.13) | 0.83 (0.59 to 1.16) | 0.89 (0.62 to 1.27) |
| Two parent, one with paid work | 0.99 (0.73 to 1.29) | 0.94 (0.72 to 1.23) | 0.93 (0.71 to 1.22) | 0.95 (0.72 to 1.24) | 1.00 (0.74 to 1.35) |
| Two parents without paid work | 0.70 (0.41 to 1.20) | 0.63 (0.37 to 1.08) | 0.63 (0.37 to 1.08) | 0.62 (0.36 to 1.06) | 0.88 (0.46 to 1.69) |
| Single parent without paid work | 1.18 (0.73 to 1.91) | 1.04 (0.64 to 1.70) | 1.05 (0.65 to 1.71) | 1.08 (0.66 to 1.75) | 1.08 (0.60 to 2.00) |

The measure for family labour market participation and the potential confounding variables (the gender and age of the child) were included in the statistical model simultaneously. The measures on family financial resources were included one by one. The p values refer to the inclusion of the variable family labour market participation in the statistical model. NS; not significant.

in paying running expenses, children in families experiencing non-employment used more medicine than did children in families with paid work.

## DISCUSSION

Financial strain associated with non-employment does not explain the increased prevalence of health problems among children in families affected by non-employment in Denmark and Sweden. However, the associations between family labour market participation and children's health differ according to family financial resources. Difficulties in paying running expenses during the past 12 months and family labour market participation interacted significantly in the statistical model with respect to recurrent psychosomatic symptoms and actual use of prescribed medicine. Among children in the families without financial strain (no difficulties in paying running expenses), family employment status was clearly associated with the prevalence of recurrent psychosomatic symptoms, with the most symptoms among children in families with one or both parents without paid work. In the group of children in families with difficulties in paying running expenses, non-employment had a reduced (and not statistically significant) effect on recurrent psychosomatic symptoms. Among children in these financially

**Table 5** Adjusted odds ratios (95% confidence intervals) for recurrent psychosomatic symptoms, chronic illness and prescribed medicine for children in families with no difficulties in paying running expenses and children in families with difficulties in paying running expenses. In a sample of 4299 Danish and Swedish children

| | | **No difficulties in paying running expenses** | **Difficulties in paying running expenses** |
|---|---|---|---|
| Recurrent psychosomatic symptoms | **Family labour market participation** | p<0.001 | NS |
| | Two parents with paid work | 1.00 | 1.00 |
| | Single parent with paid work | 1.36 (0.79 to 2.35) | 1.02 (0.58 to 1.78) |
| | Two parents, one with paid work | 1.89 (1.23 to 2.90) | 1.02 (0.60 to 1.74) |
| | Two parents without paid work | 3.07 (1.60 to 6.00) | 0.67 (0.25 to 1.74) |
| | Single parent without paid work | 3.11 (1.36–7.09) | 1.82 (0.95 to 3.47) |
| Chronic illness | **Family labour market participation** | p<0.01 | NS |
| | Two parents with paid work | 1.00 | 1.00 |
| | Single parent with paid work | 1.35 (0.89 to 2.03) | 1.36 (0.84 to 2.18) |
| | Two parents, one with paid work | 1.44 (1.04 to 1.99) | 1.18 (0.77 to 1.82) |
| | Two parents without paid work | 1.52 (0.83 to 2.80) | 1.83 (0.99 to 3.36) |
| | Single parent without paid work | 2.52 (1.33 to 4.76) | 1.54 (0.84 to 2.82) |
| Prescribed medicine | **Family labour market participation** | p<0.05 | NS |
| | Two parents with paid work | 1.00 | 1.00 |
| | Single parent with paid work | 0.64 (0.40 to 1.03) | 1.21 (0.73 to 1.99) |
| | Two parents, one with paid work | 0.80 (0.56 to 1.15) | 1.24 (0.80 to 1.93) |
| | Two parents without paid work | 0.25 (0.08 to 0.78) | 1.25 (0.63 to 2.49) |
| | Single parent without paid work | 0.37 (0.11 to 1.18) | 1.85 (1.02 to 3.35) |

The analyses were performed stratified on responses to the variable on difficulties in paying running expenses. The measure for family labour market participation and the potential confounding variables (the gender and age of the child) were included in the statistical model simultaneously. The p values refer to the inclusion of the variable family labour market participation in the statistical model. NS, not significant.

strained families, the use of prescribed medicine was increased in families in which one or both parents were without paid work. In families without financial strain the effect of parents' labour market participation on chronic illness was statistically significant, with an increased prevalence of chronic illness among children in families in which one or both parents were without work. This effect was not significant in families financially strained.

### Strengths and weaknesses of the study

The samples were representative in each country, and a broad age range was chosen. The response rate was 69%. Non-response was higher among parents not in paid work, those with little or no education, ethnic minorities, and single parents. This would probably tend to underestimate the associations described here. However, the decisive factor is whether non-response differs between parents with and without paid work depending on the health of their children. Even though there might be such an association, there is no reason to expect it to be strong. The mailed questionnaire instructed the parent who was most familiar with the child's situation to fill in the questionnaire together with the child and the other parent if possible. Almost half the children aged 7 to 17 years were reported to have participated in completing the questionnaire. Parent reported data were chosen mainly to cover the wide age range of children and to obtain reliable data on items concerning the parents. As children differ in their tendency to report symptoms to their parents, there was probably some underreporting. The parents' reports on their children can depend on their own health; parents with health problems would be expected to report more health problems among their children than would parents without health problems. This might be a problem because symptoms and diseases are not equally distributed among parents with paid work compared with parents without paid work. These problems are very complex, however, because psychosomatic symptoms as a reaction to stress have some aspects of learning incorporated.[24 25] However, our results showed that introducing the respondents' symptoms in the statistical model only slightly weakened the association between family labour market participation and children's health, and significant associations remained significant (figures not shown). Only parents without paid work within the past six months or more were categorised as parents without paid work.

Three indicators were used to measure children's health: recurrent psychosomatic symptoms, chronic diseases and use of prescribed medicine. The most frequent symptoms were abdominal pain and headache. Several studies investigating the causes of abdominal pain among children have shown that the symptoms have psychosocial origin in 95% of cases.[26 27] For headache, about 75% of cases have a psychosocial pathogenesis.[28] Chronic illness in this study covered one or more specific diseases, disorders, defects, impairments, or disabilities that had considerably affected the child's daily life during at least three months of the previous year. The most frequently reported diseases were asthma, allergies, and eczema, all conditions with a multifactorial pathogenesis.[29] The actual use of prescribed medicine in this study covers many types of medicine. The most frequently used prescribed medicine were antiallergy agents and drugs for asthma and eczema.

### Strengths and weaknesses in relation to other studies and important differences in results

This study shows that financial strain is an important risk factor for health problems among children, in accordance with other studies.[30–32] Nevertheless, financial strain was an independent phenomenon without a direct and necessary link to non-employment, in contrast with other studies.[16 33–36] These differences in results might illustrate the comparatively high economic compensation given to parents without paid work in Denmark and Sweden. This study focused on children's health, and family labour market participation was therefore studied. The use of three measures for children's health suggests that different mechanisms link family labour market participation and various dimensions of children's health.

### Meaning of the study: possible explanations and implications for clinicians and policymakers

Financial strain does not explain the association between children's health and parental labour market participation, but the associations differ according to family financial resources and to outcome measures for children's health. These results point to a complex connection between parental labour market participation and children's health. It is necessary to consider whether children's health influences parental labour market participation.[10 37] Denmark and Sweden have very high employment rates among parents, but diseases and psychosomatic symptoms among children could influence the parental potential and perhaps personal desire to have paid work, especially in families without financial strain. Children in families with fewer financial resources have increased prevalence of health problems among children measured as recurrent psychosomatic symptoms regardless of family labour market participation, and parental non-employment has diminished influence on the prevalence of symptoms. In contrast, the influence of parental non-employment on the use of prescribed medicine is increased in families with fewer financial resources. These differences cannot be explained by differences in access to free medicine according to labour market participation.

### Unanswered questions and future research

Future studies of children's health problems in families without paid work should analyse the effects mediated by the depression and stress experienced by the parents without paid work. Furthermore, studies would benefit from a life course perspective to distinguish selection from causation in the associations found.

**Key points**

- Children in families without paid work have more health problems after controlling for social status, family type, and immigrant status.
- The association between parent's non-employment and children's morbidity is only partially explained by financial strain. The strength of the association differs according to family financial resources.

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