

RESEARCH REPORT

Parental share in public and domestic spheres: a population study on gender equality, death, and sickness

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Study objective: Examine the relation between aspects of gender equality and population health based on the premise that sex differences in health are mainly caused by the gender system.

Setting/participants: All Swedish couples (98 240 people) who had their first child together in 1978.

Design: The exposure of gender equality is shown by the parents' division of income and occupational position (public sphere), and parental leave and temporary child care (domestic sphere). People were classified by these indicators during 1978–1980 into different categories; those on an equal footing with their partner and those who were traditionally or untraditionally unequal. Health is measured by the outcomes of death during 1981–2001 and sickness absence during 1986–2000. Data are obtained by linking individual information from various national sources. The statistical method used is multiple logistic regressions with odds ratios as estimates of relative risks.

Main results: From the public sphere is shown that traditionally unequal women have decreased health risks compared with equal women, while traditionally unequal men tend to have increased health risks compared with equal men. From the domestic sphere is indicated that both women and men run higher risks of death and sickness when being traditionally unequal compared with equal.

Conclusions: Understanding the relation between gender equality and health, which was found to depend on sex, life sphere, and inequality type, seems to require a combination of the hypotheses of convergence, stress and expansion.

Sex differences in mortality and in various measures of morbidity are well reported. The point of departure in this paper is that these differences mainly depend on factors related to the gender system,^{1–2}—that is, the societal structure organising human activities and relations based on sex.^{3–4}

Some researchers believe that the current gender system mainly counteracts female health,⁵ while others assert that it mostly constitutes a health risk for men.⁶ Yet, the underlying premise in much research is that gender equality, defined as more or less similarity between the sexes in every sphere of life,⁷ would come to little or no sex difference in health.⁸ Basically, women will enter health promoting and health damaging behaviours and duties traditionally linked to men, and vice versa.

The hypothesis of convergence has been difficult to verify because of missing data for both sexes and for both domestic and public spheres. However, it is known that men use health damaging behaviours as means of demonstrating masculinity,^{9–10} and that men's excess mortality is partly caused by factors that are more accepted among men than among women (alcohol, violence, risk taking, etc).^{11–13} That is, if men quit conventional masculinity, or if women adopt it, the sex differences in health would decrease. Moreover, it is proposed that women in general are more averse to health risks and live longer lives because of their prime and concrete taking care of children.^{14–15} Consequently, if men were more engaged in the responsibility for children, they could adopt a more health promoting attitude.

Traditionally, men's primary role in life has been productive work and the responsibility to support a family, while women's primary role has been reproductive work at home and within the family.¹⁶ As this division has loosened, an examination of the relation between the gender system and health differences, should also consider health impact from multiple roles.¹⁷ According to the stress hypothesis, people

with many responsibilities and occupancies experience more pressure, conflict, and ill health; the reason is that the primary role in life is so hard that additional duties risk health.¹⁸ The expansion hypothesis departs from the contrary; people with many roles have health advantages compared with others as they may compensate stress in one area with positive circumstances in other areas.¹⁹ The major part of research on multiple roles is related to women (as they are hitherto most confronted) and concludes possible health problems, but also, that these are less severe than problems associated with having too few roles.^{20–22} Studies among men report that job and parental role quality (not parental status) predict health,²³ and that multiple roles imply health advantages.²⁴ We conclude that multiple roles seem to benefit health among both sexes as long as the overall stress level is not excessive.

Our objective is to study the relation between aspects of gender equality and health in Sweden. We aim to examine if couples consisting of mothers and fathers acting unequally in the public sphere during early parenthood have different risks of death and sickness than mothers and fathers acting equally in the same sphere; and whether the risks between parents acting unequally and equally in the domestic sphere differ. The concept of "tradition" is throughout referred to as male dominance in public and female dominance in domestic, while "untraditional" refers to the opposite.

It is our principal belief that gender equality associates with reduced sex differences in health. However, as women entered paid work before men entered concrete childcare (Statistics Sweden), we believe in considering that the sexes have different starting positions regarding multiple roles. Härenstam *et al*²⁵ state (p 280): "as most men are active in one sphere, they are worse off than women, according to the expansion hypothesis. If men were to expand their work and responsibilities to include the private sphere, this might lead to a change in social roles and behaviours, improved

well-being and perhaps also longer lives. Moreover, it would also benefit women's health, since it would reduce the overall burden on them."

Our tentative expectations regarding gender equality in solely the public sphere is that women lose health by adopting traditionally male health damaging behaviours (convergence hypothesis) and by excess of duties (stress hypothesis). On the other hand, equal men in the public sphere could gain health, for instance, by losing behaviours and duties linked to traditional masculinity. Regarding gender equality in the domestic sphere, we expect men to gain health by adopting health protecting childcare responsibilities (convergence hypothesis) and by extended roles (expansion hypothesis). Furthermore, equal women in the domestic sphere should gain health from released stress burden. Hence: (1) lower female risks/higher male risks when being traditional compared with equal in the public sphere and (2) higher female/male risks when being traditional compared with equal in the domestic sphere. As to the effects of being untraditional compared with equal, we apply an explorative view.

METHOD

Population

The population comprises all couples in Sweden who had their first child together in 1978. The choice of year was based on double consideration; it made classification of gender equality in the domestic sphere feasible (men were entitled to parental leave in 1974, but their utilisation was solely 0.5%) and it made mortality outcomes relevant (although premature). It was generated from the Multigenerational Register (Statistics Sweden), which consists of children registered after 1961 and their parents. By a civic identification number assigned to all Swedish inhabitants, personal information from different data sources was linked to the population.

Gender equality, independent variables

The choice of independent variables was guided by feminist justice,²⁶ and a gender quality index aimed at evaluating equality in municipalities (Statistics Sweden). Income and occupational position were selected as indicators of gender (or parental) equality in the public sphere; and parental leave allowances and temporary child care benefit as indicators in the domestic sphere.

The independent information was transformed to ratios between the parents (note, male to female if public indicator and female to male if domestic indicator). The couples were then classified into five categories of (in)equality based on the guiding principle in Swedish gender policies. That is, equality is defined when both parents have at least 40% respectively of the parents' total income, parental leave, etc, while pronounced inequality is defined when one of the parents have less than 20%. The implication of these principles when transformed to ratios is: pronounced traditional >4.0, moderate traditional 4.0–1.5, equal 1.5–0.67, moderate untraditional 0.67–0.25, pronounced untraditional <0.25.

Information on income was obtained from the Income and Assets Register of 1980 (Statistics Sweden), and consists of different sources of income such as paid employment, capital, business, etc. The requirement for classifying (in)equality by income was that information on income were available for both parents.

Information on occupational position was obtained from the Swedish Population and Housing Censuses of 1980 (Statistics Sweden). It was ranked into eight levels of occupation: no independent occupational position, unskilled manual workers, routine (lower level) non-manuals, skilled manual workers, routine (higher level) non-manuals, intermediate non-manuals, self employees (including farmers), and higher managers and professionals.²⁷

Information on parental leave was obtained from the Social Insurance Register (National Social Insurance Board), and consists of full time days with allowances in 1978 and 1979. During these years, the entitlement per child years was 270 days of which 240 income related. The requirement for classifying (in)equality by parental leave was that at least one of the parents was entitled to parental leave allowances.

Information on temporary child care was obtained from the Social Insurance Register (National Social Insurance Board), and consists of full time days with income related benefit in 1980. The requirement for classifying (in)equality by temporary child care was that at least one of the parents received temporary child care benefit.

The reason for measuring gender equality during different years was that parental leave is almost entirely utilised during the child's first year (hence 1978–1979), while the division of income, occupational position, and temporary care, are most relevant when both parents could have returned to the public sphere (hence 1980).

Table 1 Numbers of female (F) and male (M) deaths and occurrence of sickness*, and the numbers of couples in each (in)equality category, by indicator of gender equality

| | Traditional pronounced unequal | | Traditional moderate unequal | | Equal couples | | Untraditional moderate unequal | | Untraditional pronounced unequal | | Total | |
|-----------------------|--------------------------------|-------|------------------------------|------|---------------|------|--------------------------------|-----|----------------------------------|------|-------|-------|
| | F | M | F | M | F | M | F | M | F | M | F | M |
| Income | | | | | | | | | | | | |
| Deaths | 228 | 425 | 379 | 733 | 295 | 629 | 28 | 119 | 28 | 64 | 958 | 1970 |
| Sickness | 2533 | 2440 | 4973 | 4692 | 3571 | 3868 | 450 | 499 | 229 | 233 | 11756 | 11732 |
| Couples (n) | 9259 | | 20174 | | 13522 | | 1634 | | 843 | | 45432 | |
| Occupation | | | | | | | | | | | | |
| Deaths | 80 | 137 | 269 | 509 | 296 | 630 | 67 | 145 | 0 | 13 | 712 | 1434 |
| Sickness | 733 | 558 | 3801 | 3572 | 3728 | 4029 | 664 | 822 | 19 | 21 | 8945 | 9002 |
| Couples (n) | 3466 | | 13360 | | 17548 | | 2946 | | 107 | | 37427 | |
| Parental leave | | | | | | | | | | | | |
| Deaths | 925 | 1965 | 39 | 70 | 20 | 46 | 3 | 12 | 14 | 9 | 1001 | 2102 |
| Sickness | 11059 | 10925 | 406 | 461 | 219 | 229 | 51 | 44 | 69 | 55 | 11804 | 11714 |
| Couples (n) | 42268 | | 2184 | | 976 | | 177 | | 196 | | 45801 | |
| Temporary care | | | | | | | | | | | | |
| Deaths | 279 | 787 | 61 | 108 | 60 | 94 | 46 | 76 | 213 | 369 | 659 | 1434 |
| Sickness | 3807 | 3690 | 810 | 823 | 787 | 791 | 608 | 634 | 2847 | 2735 | 8859 | 8673 |
| Couples (n) | 13804 | | 3635 | | 3498 | | 2664 | | 10695 | | 34296 | |

*Sickness is defined as the occurrence of days on sickness absence over the 75th centile for each sex.

Table 2 Mortality for women and men: odds ratios for inequality compared with equality; unadjusted, and adjusted for age, income, and absolute levels (95% confidence intervals)

| Indicator of gender equality | Women | | Men | |
|-----------------------------------|---------------------------------|---|---------------------------------|--|
| | Odds ratios Unadjusted (95% CI) | Odds ratios Adjusted for age, income and absolute level* (95% CI) | Odds ratios Unadjusted (95% CI) | Odds ratios Adjusted for age, income, and absolute level* (95% CI) |
| Income (public): | | | | |
| Traditional-pronounced | 1.13 (0.95, 1.35) | 0.63 (0.48, 0.82) | 0.99 (0.87, 1.12) | 1.04 (0.92, 1.19) |
| Traditional-moderate | 0.86 (0.74, 1.00) | 0.71 (0.60, 0.84) | 0.77 (0.69, 0.86) | 0.92 (0.82, 1.03) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 0.78 (0.53, 1.16) | 0.78 (0.53, 1.15) | 1.61 (1.31, 1.97) | 1.11 (0.89, 1.38) |
| Untraditional-pronounced | 1.54 (1.04, 2.28) | 1.39 (0.93, 2.07) | 1.68 (1.29, 2.20) | 0.98 (0.73, 1.32) |
| Occupation (public): | | | | |
| Traditional-pronounced | 1.38 (1.07, 1.77) | 0.68 (0.50, 0.93) | 1.10 (0.92, 1.33) | 1.16 (0.95, 1.43) |
| Traditional-moderate | 1.20 (1.01, 1.42) | 0.88 (0.71, 1.09) | 1.06 (0.94, 1.20) | 1.12 (0.99, 1.27) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 1.36 (1.04, 1.77) | 1.58 (1.20, 2.07) | 1.39 (1.16, 1.67) | 1.04 (0.85, 1.28) |
| Untraditional-pronounced | – | – | 3.71 (2.07, 6.67) | 0.79 (0.38, 1.61) |
| Parental leave (domestic): | | | | |
| Traditional-pronounced | 1.07 (0.68, 1.67) | 1.61 (0.93, 2.78) | 0.99 (0.73, 1.33) | 1.06 (0.69, 1.63) |
| Traditional-moderate | 0.87 (0.50, 1.50) | 1.17 (0.64, 2.14) | 0.67 (0.46, 0.98) | 0.71 (0.48, 1.06) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 0.82 (0.24, 2.80) | 0.93 (0.27, 3.24) | 1.47 (0.76, 2.84) | 1.01 (0.51, 2.38) |
| Untraditional-pronounced | 3.68 (1.82, 7.41) | 2.83 (1.27, 6.32) | 0.97 (0.47, 2.02) | 0.69 (0.31, 1.56) |
| Temporary care (domestic): | | | | |
| Traditional-pronounced | 1.18 (0.89, 1.57) | 1.14 (0.85, 1.52) | 2.19 (1.76, 2.72) | 1.59 (1.26, 2.00) |
| Traditional-moderate | 0.98 (0.68, 1.40) | 0.94 (0.66, 1.36) | 1.11 (0.84, 1.47) | 1.05 (0.79, 1.39) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 1.01 (0.68, 1.48) | 1.06 (0.72, 1.56) | 1.06 (0.78, 1.44) | 1.11 (0.81, 1.52) |
| Untraditional-pronounced | 1.16 (0.87, 1.56) | 1.09 (0.80, 1.48) | 1.29 (1.03, 1.63) | 1.32 (1.04, 1.67) |

*Absolute levels of female and male income (for income), occupational position (for occupation), parental leave (for parental leave), and temporary care (for temporary care).

Health, dependent variables

Health was measured by overall mortality and sickness absence. Information on deaths during 1981–2001 was obtained from the National Cause of Death Register (National Board of Health and Welfare), and information on sickness absence during 1986–2000 (1986 was the first year of individually based data in Sweden) from the Social Insurance Register (National Social Insurance Board). The health outcomes were dichotomised; for days on sickness leave by the 75th centile (that is, men 172 days, women 279 days).

Statistical analysis

The statistical method used was multiple logistic regressions, with odds ratios as estimates of relative risks. The reference group was equal women/men (in the range 0.67–1.5)—that is, the results show risks of death and sickness in the four inequality categories compared with the equal category. Age, socioeconomic position (shown by income), and country of birth were evaluated for possible confounding. Initially, unadjusted odds ratios were calculated, and afterward these estimates were adjusted for age, income, and absolute levels for each indicator of gender equality (the aim is to study health impact from the relative position of the mother and father).

The analyses were performed in SAS version 8.2.

The study was approved from an ethical point of view by the research ethics committee at Umeå University in April 2003.

RESULTS

Descriptive information

The population consists of 49 120 parental couples. Mean age when the parents had their first child together was 25.8 for women and 28.8 for men; and mean income in 1980 was about \$4820 for women and \$9136 for men. Occupational data show for instance that 21% of women and 1% of men had no independent occupational position, and that 4% of

women and 10% of men were higher managers or professionals. Average days of parental leave were 228.2 among women and 8.8 among men, while corresponding days of temporary childcare were 4.3 and 3.6.

Table 1 shows the number of female/male deaths and sickness, along with information on the classification of equal/unequal. The disparate totals of classified couples are attributable to variations in available data and utilisation; for instance, a considerable number of couples received no childcare benefit in 1980 ($n = 34\ 296$), while at least one parent, among most couples, received parental leave allowances in 1978–1979 ($n = 45\ 801$). The reason for completing the regression analyses by diverse samples is that the risk estimates come from comparisons within each indicator (that is, no bias in the results for the separate indicators). The (in)equality levels are greatly dependent on indicator; for instance, 2% equal and 92% pronounced traditional by parental leave, while 47% equal and 9% pronounced traditional by occupational position.

Logistic regressions

The results from the logistic regression analyses are shown in table 2 (female and male mortality) and table 3 (female and male sickness).

The female odds ratios adjusted for age, income, and absolute levels (“fully adjusted”) show that being traditional in the public sphere is associated with lower death risks. In comparison with equal women, pronounced traditional have, for example, significant decreased risks of 37% (income) and 32% (occupation), while moderate untraditional in occupational position have an increased risk of 58% (note, no death in the pronounced category). The only significant female finding in the domestic sphere is the almost three times higher risk among pronounced untraditional in parental leave. This indicator also points at 61% increased risk for women who are pronounced traditional compared with equal. In the public sphere, none of the fully adjusted male odds ratios are significant. However, it is indicated that

Table 3 Sickness for women and men: odds ratios for inequality compared with equality; unadjusted, and adjusted for age, income, and absolute levels (95% confidence intervals)

| Indicator of gender equality | Women | | Men | |
|-----------------------------------|---------------------------------|---|---------------------------------|--|
| | Odds ratios Unadjusted (95% CI) | Odds ratios Adjusted for age, income and absolute level* (95% CI) | Odds ratios Unadjusted (95% CI) | Odds ratios Adjusted for age, income, and absolute level* (95% CI) |
| Income (public): | | | | |
| Traditional-pronounced | 1.05 (0.99, 1.11) | 0.55 (0.50, 0.60) | 0.89 (0.84, 0.95) | 1.08 (1.02, 1.15) |
| Traditional-moderate | 0.91 (0.87, 0.96) | 0.71 (0.67, 0.75) | 0.76 (0.72, 0.80) | 0.96 (0.91, 1.01) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 1.06 (0.94, 1.19) | 1.08 (0.96, 1.22) | 1.10 (0.98, 1.23) | 0.64 (0.57, 0.72) |
| Untraditional-pronounced | 1.04 (0.89, 1.22) | 0.92 (0.78, 1.08) | 0.95 (0.82, 1.11) | 0.39 (0.33, 0.46) |
| Occupation (public): | | | | |
| Traditional-pronounced | 0.99 (0.91, 1.09) | 0.40 (0.36, 0.44) | 0.64 (0.58, 0.71) | 1.03 (0.92, 1.14) |
| Traditional-moderate | 1.47 (1.40, 1.55) | 0.79 (0.74, 0.84) | 1.22 (1.16, 1.29) | 1.23 (1.16, 1.30) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 1.08 (0.98, 1.18) | 1.42 (1.29, 1.56) | 1.30 (1.19, 1.42) | 0.74 (0.67, 0.81) |
| Untraditional-pronounced | 0.80 (0.49, 1.32) | 1.26 (0.76, 2.09) | 0.82 (0.51, 1.32) | 0.20 (0.12, 0.33) |
| Parental leave (domestic): | | | | |
| Traditional-pronounced | 1.22 (1.05, 1.43) | 1.10 (0.93, 1.31) | 1.14 (0.98, 1.32) | 1.04 (0.84, 1.29) |
| Traditional-moderate | 0.79 (0.66, 0.95) | 0.78 (0.64, 0.94) | 0.87 (0.73, 1.04) | 0.88 (0.70, 1.06) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 1.40 (0.98, 2.00) | 1.36 (0.95, 1.96) | 1.08 (0.74, 1.56) | 1.05 (0.70, 1.56) |
| Untraditional-pronounced | 1.88 (1.35, 2.61) | 1.92 (1.37, 2.70) | 1.27 (0.90, 1.80) | 1.24 (0.85, 1.81) |
| Temporary care (domestic): | | | | |
| Traditional-pronounced | 1.31 (1.20, 1.43) | 1.14 (1.04, 1.24) | 1.25 (1.14, 1.36) | 1.27 (1.16, 1.40) |
| Traditional-moderate | 0.99 (0.88, 1.10) | 0.88 (0.79, 0.99) | 1.00 (0.90, 1.12) | 1.06 (0.95, 1.19) |
| Equal couples (reference group) | 1 | 1 | 1 | 1 |
| Untraditional-moderate | 1.02 (0.90, 1.15) | 1.10 (0.97, 1.24) | 1.07 (0.95, 1.21) | 1.01 (0.89, 1.14) |
| Untraditional-pronounced | 1.25 (1.14, 1.37) | 1.31 (1.19, 1.44) | 1.18 (1.07, 1.29) | 1.07 (0.97, 1.17) |

*Absolute levels of female and male income (for income), occupational position (for occupation), parental leave (for parental leave), and temporary care (for temporary care).

traditional men in occupational position have increased death risks compared with equal men (16% and 12%). The indicator of temporary childcare shows that pronounced traditional men have higher risks (59%), but also that pronounced untraditional men have higher risks (32%).

The fully adjusted female odds ratios in the public sphere show that being traditional is associated with lower sickness risks than being equal. Pronounced traditional women have, for example, significant decreased risks of 45% (income) and 60% (occupation), while moderate untraditional women in occupational position have an increased risk of 42%. The domestic findings regarding traditional women are mixed, but it is shown that pronounced untraditional women have higher risks (92% in parental leave and 31% in temporary care). Compared with equal men, pronounced traditional men in income have 8%, and moderate traditional men in occupation 23%, higher sickness risks. Also pronounced traditional men in temporary childcare have a higher risk (27%). In addition, it is shown that being an untraditional man in the public sphere is significantly associated with lower sickness risks.

DISCUSSION

The results are mainly in accordance with our tentative expectations. Traditional women in the public sphere run

What is already known

- The gender system contributes to sex differences in health by means of assigning different health related behaviours and duties to women and men.
- Studies on aggregate data have shown that moves towards gender equality associates with improved population health.

What this study adds

- This study explores how gender equality during early parenthood associates with subsequent death and sickness leave.
- From the public sphere is shown that equal women have increased health risks while equal men tend to have decreased health risks.
- From the domestic sphere is indicated that being equal benefit both sexes' health.

lower risks of death and sickness than equal women, while traditional men in the public sphere tend to have higher risks than equal men. This points at support for the convergence hypothesis regarding mortality by means of, for instance, equal women entering health damaging behaviours traditionally linked to men. The sickness findings point at support for the stress hypotheses, for instance as we found that among equal couples in income (n = 13 522) only 0.6% were at once classified equal in both domestic indicators, and that among equal couples in occupational position (n = 17 548) only 0.5% were entirely equal in the domestic sphere. That is, equal women in public may not yet have been released from, and equal men not yet stressed by, double work.

From the domestic sphere, it is significantly shown that traditional men (temporary care) have higher risks compared

Policy implication

An implication, based on both public health and feminist goals, is that policies should stress an equalised division of childcare responsibilities between parents.

with equal men. This supports the hypothesis of convergence for death (equal men enter traditionally female health protecting activities) and the hypothesis of expansion for sickness (equal men benefit from added roles). For women, it is also indicated that the traditional category (parental leave) has higher mortality risks than the equal category. This may reflect support for the stress hypothesis—that is, less burden of fatal pressure among women who share equally domestic duties with their partner.

There are several weaknesses in the study. Swedish registers are deemed to be reliable in general.²⁸ Nevertheless, the utilisation of registry data conveys potential faults because of classification, registration, and cheating, which may have distorted the categories of traditional, equal, and untraditional, and hence, the results. For illustration, an inspection by the National Social Insurance Board shows that 8.3% of the temporary child care benefit among frequent recipients in 2004 was founded on incorrect grounds.²⁹ Overall mortality is a reliable measure, but sickness leave is disputed. From the Swedish setting is proposed that it depends on working and personal life, employees' coping patterns, physicians' production of certificates, the insurance system and the level of benefit; and moreover, that it communicates with unemployment, disability pension, and parental leave.³⁰ The reason for considering sickness leave is the finding that it is mainly caused by ill health.³¹

An important weakness is also that we have not been able to control for health related selection. The substantial higher risk among untraditional women in parental leave does, for instance, most probably reflect ill health close to giving birth as it is rare that mothers have no/few days on parental leave. This associates with our general advice that the results regarding couples who act against the gender tradition should be carefully interpreted. Moreover, the dataset lacks data on factors that could explain mechanisms operating in the link between gender equality in the beginning of parenthood and subsequent health outcomes (income development, workload, risk aversion, alcohol drinking, eating habits, etc). Another weakness is cultural bias as the studied phenomenon is a distant notion in many countries. One might also question the relevance of examining individual aspects of gender equality in a society structured by gender. These weaknesses are examples of what we believe should be investigated in future research about gender equality and public health.

The important strength is the large set of individual data that makes it possible to measure gender equality by both public and private indicators and health by both overall mortality and sickness leave. We are not aware of individually based studies aimed at examining how gender equality, measured by male/female and female/male ratios, associates with health. Yet, a study from the USA reports that women, but also men, experience higher mortality and morbidity in states where women have lower levels of political participation and economic autonomy.³² Furthermore, a cross-country study shows that there is a substantial association between the level of patriarchy, measured by female homicide rates, and male mortality; the conclusion is that the oppression of women harms both women and men.³³ These findings harmonise with our finding that gender equality in the domestic sphere tend to benefit both sexes' health.

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