Influence of Macrosocial Policies on Women’s Health and Gender Inequalities in Health

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Gender inequalities in health have been widely described, but few studies have examined the upstream sources of these inequalities in health. The objectives of this review are 1) to identify empirical papers that assessed the effect of gender equality policies on gender inequalities in health or on women’s health by using between-country (or administrative units within a country) comparisons and 2) to provide an example of published evidence on the effects of a specific policy (parental leave) on women’s health. We conducted a literature search covering the period from 1970 to 2012, using several bibliographical databases. We assessed 1,238 abstracts and selected 19 papers that considered gender equality policies, compared several countries or different states in 1 country, and analyzed at least 1 health outcome among women or compared between genders. To illustrate specific policy effects, we also selected articles that assessed associations between parental leave and women’s health. Our review partially supports the hypothesis that Nordic social democratic welfare regimes and dual-earner family models best promote women’s health. Meanwhile, enforcement of reproductive policies, mainly studied across US states, is associated with better mental health outcomes, although less with other outcomes. Longer paid maternity leave was also generally associated with better mental health and longer duration of breastfeeding.

health status; public policy; sex factors; socioeconomic factors; women’s health

INTRODUCTION

Gender is a strong determinant of most health outcomes (1, 2). Gendered inequalities in health reflect the fact that women suffer more than men from a host of nonfatal, disabling physical and mental illnesses and are generally expected to live fewer years in good health (3) despite having a higher life expectancy (4, 5). For example, in the US general population, women systematically report lower health-related quality of life than men across 6 different instruments (6) and a 26% higher probability of poor self-rated health even after adjustment by demographic factors (7), differences that have been shown to be coherent with other morbidity measures and not attributable to a greater tendency to report illness (8). Moreover, poor self-rated health has been associated with higher mortality (9).

The acquisition of gender roles and stereotypes starts early, with the socialization of girls and boys, continues throughout the life course, and results in gender inequalities in power and in the unequal division of paid and unpaid work. On the one hand, patriarchy, the systematic domination of women by men, restraints women’s access to social and employment-related privileges and economic resources and assigns them a larger share of domestic responsibilities (unpaid work) with consequences to women’s health status (10–12). Hegemonic masculinity, on the other hand, understood as the development and maintenance of a heterosexual male identity, promotes the taking of risks that are hazardous to health and contributes to premature mortality among men compared with women (13, 14). Thus, although biology plays a part in health differences between men and women, the higher burden of suffering is related mainly to social inequalities grounded in gender (2). “Gender” is a social construct based in culture-bound conventions, roles, and behaviors for, as well as in relationships between and among, women and men (15). In this paper, gender inequalities are considered unfair, unjust, avoidable, and unnecessary differences between women and men (15).

Several epidemiologic studies have shown that gender inequalities in health outcomes (e.g., mental health, pain disorders) can be explained by inequalities between men and women in some key social determinants of health, including...
1) income (when differences in income by gender are con-
sequent of limited access to labor markets, segregation, or gen-
dered pay gaps, and, in the elderly, limited entitlement to
pensions and economic independence results among women)
(7, 16, 17); 2) paid work (when women have differential
access to labor markets and, once working, their labor is less
valued (horizontal segregation), wield less authority (verti-
cal segregation), or face other different working conditions
(3, 18); and 3) unpaid work (when other inequalities in par-
ticipation in society are justified by the gender ideology that
attaches to women primary responsibility for labor performed
in the household, including care for others) (19, 20).

Although rarely studied in epidemiologic research (21, 22),
macro-social determinants of health, such as political power,
the welfare state, social protection policies, and economic and
labor market policies, are major drivers of the social structure
and power relations within society (23–25). These power rela-
tions generate social inequalities in health that researchers are
now beginning to investigate, including their causes and the
policies that increase or reduce them (26, 27).

As O’Campo and Dunn (21) stated, social epidemiology
has focused on describing the existence of social inequalities
and their risk factors (problem identification) but much less
on the causes of these inequalities (problem-focused research)
or on evidence of effective interventions to reduce them (solution-
focused research). In this sense, although gender inequalities
in health have been widely described, few studies have exam-
ined their upstream determinants including policies. Moreover,
the analysis of policies from different countries may provide
further information on the implementation of gender equality
policies in different contexts and their effect on health. There-
fore, the objectives of this review are 1) to identify empirical
papers that assessed the effect of gender equality policies on
gender inequalities in health or on women’s health by using
between-country (or administrative units within a country) com-
parisons and 2) to provide an example of published evidence
on the effects of a specific policy (parental leave) on women’s
health. To contextualize our hypothesis, we first outline frame-
works of gender equality policies and some specific policy
types.

Policies to reduce gender inequalities

Policy is important in enforcing the promotion of equality
between men and women in society. Gender policy regimes
include multiple policies that intentionally or unintentionally
target gender equality. Such regimes emerge from a particular
understanding of gender relations, and they reinforce rules and
norms governing men’s and women’s behavior (28). The
majority of gender-regime typologies have emerged as a cri-
tique of Esping-Andersen’s welfare state typology (29) and its
“gender-blind” analysis. Esping-Andersen defined a welfare-
state regime as the set of institutional arrangements, rules, and
understandings that guides and shapes social policy decisions,
expenditure developments, problem definitions, and even the
demand-and-response structures connecting states with citi-
zens and welfare consumers. Key concepts in his typology are
1) decommodification (the degree to which individuals or fam-
ilies can maintain relative economic autonomy from the market);
2) social stratification (how welfare states structure social class);
and 3) state-market relations (the share of public and private
welfare provision). On the basis of these dimensions, he
describes 3 regimes: liberal (i.e., common in North America,
the United Kingdom, and Ireland, that favors the role of the
private market over the role of the government and the fam-
ily in the provision of goods and services); conservative/
corporativist; and social democratic (i.e., northern European
countries where the role of the government is important). The
main critique of Esping-Andersen by gender scholars is
that gender relations are central to understanding inequalities
in welfare states (28, 30–32). They argue that explicit atten-
tion must be paid to patriarchy and its effects on social ser-
vices and labor markets, including policies and programs
addressed to gender equality (32, 33). Later welfare-state
scholarship has taken up this call (34–37). However, femi-
nist academics have gone further to propose several gender-
regime typologies (28, 30–33).

Korpi (36) and Korpi et al. (37) have categorized welfare
states on the basis of the degree of support they offer to a dual-
earner model. That is, to what extent do policy institutions
encourage women’s continuous labor force participation, enable
parents (men and women) to combine parenthood with paid
work, and attempt to redistribute caring work within the fam-
ily? Social-democratic welfare state countries embrace this
dual-earner family model. A second type of family model
is the “market-oriented model,” encouraged mainly by liberal
countries, that allows market forces to dominate how gender
relations are shaped, leaving individuals to find private solu-
tions based on their market resources and family support. The
“traditional family policy model,” meanwhile, is found in con-
servative and southern European countries like Belgium, the
Netherlands, Italy, and Spain, which offer high levels of sup-
port for the traditional family and low levels of dual-earner
support. Reproduction work is thereby actively allocated to
the family, and lower support exists for female labor-force par-
ticipation. Others authors have added the “contradictory model”
to refer to countries that score high in support for both tradi-
tional and dual-earner models (38).

In the United States, much has been written about how wel-
fare, which primarily supports lone mothers, was designed with-
out regard for gender, since these programs were modeled after
unemployment insurance policies that favor a male trajec-
tory of climbing out of poverty by providing only temporary
income replacement without additional support, such as child
care benefits, needed by lone mothers (25, 39).

Specific policies related to gender equality are presented in
Figure 1, which is slightly modified from the proposal of Pascall
and Lewis (40), where they presented the policies for each social
determinant of health (voice, paid work, incomes, care
work, time), and here we present them by type of policies.
In the figure, policies are identified across different levels of
intervention (individual, household, community, and society).
These policies are discussed below.

Policies to promote political representation. Women, com-
pared with men, have fewer opportunities to be socially and
politically active and to influence laws and politics. Because
institutions and policies are more likely to favor the interests
of those with more influence, men wielding that influence
have less incentive to address the institutional constraints that
feed gender inequalities in political representation (41). For example, in Spain, parliamentary initiatives to address gender-based violence have been more frequently promoted by women (42). Moreover, the difference in voice between men and women also exists on smaller scales, like communities, where men usually have more power. Some policies to increase women’s participation in politics include proportional representation and quotas to reach greater representational parity (43, 44). Policies aimed at developing social movements that advocate for women’s interests are also important.

**Employment policies.** Employment conditions are not the same for men and women. Men benefit from more opportunities for paid work. When women do enter the labor market, they suffer from horizontal and vertical segregation. Thus, labor market regulation is important for influencing gender inequalities in employment and equal pay (45). Gender equality policies should also promote equal access to quality jobs. In many cases, gendered employment policies seek to give men and women a flexible work time so they can reconcile paid work with family and civil-society activities. Yet these policies do not uniformly support women. For example, part-time work opportunities can be either a means of facilitating women’s integration into paid work or a means of maintaining traditional divisions of labor (46).

**Policies to promote equal incomes.** Men and women have unequal access to income. This relates mainly to the fact that women have less access to paid work, worse paid jobs, lower salaries for the same jobs and, consequently, lower pensions. Therefore, policies to promote equal opportunities in earnings are a high priority (47). Other policies that have been instituted in this area include equal rights to benefits (e.g., pensions) for unpaid carers taking into account that pensions for women are lower as unpaid care and work are not taken into account nor are pensions appropriately split upon divorce (48).

**Family policies.** This group of policies seeks to increase family well-being and to promote reconciliation between paid work and family. Family support is a cross-cutting issue that may include support for employment, transport, food, education, and so on (49, 50). Family policies include regulations that promote gender equality in the areas of, for example, divorce, same-sex partnerships, and reproductive rights (e.g., birth control) and social policies toward, for example, child and elder care. Child-care policies include state care services (e.g., public child-care services) and benefits (e.g., child-related tax allowances) (40). Parental leave policies aim to secure both women’s income during leave and their return to work while promoting mother and infant well-being. Paternity leave policies can further promote gender equality by facilitating greater...
participation of fathers in child care and of mothers in the labor market.

**Policies to promote gender-equitable use of time.** Women have less time than men because they bear a greater burden of unpaid work. Policies that promote less gender-biased uses of time are policies that produce time control in the household, to develop the different activities. Anti-gender discrimination policies for the labor market are useful (47), but part-time work should have equal value to full-time work. Other policies include school scheduling to match work times or services related to the household (e.g., food markets), leisure time sports facilities offered at different hours, and so on.

The policies described above target existing gender inequalities in power, income, paid and unpaid work, and use of time. The alleviation of these gender inequalities, in turn, impacts health, especially for women, through mechanisms such as a reduction in stress, discrimination, violence, financial difficulties, poverty, double burden of work, or time pressure. For example, women who have a higher burden of household unpaid work have worse health outcomes than men (19, 20, 51). Therefore, family and employment policies that reduce the burden and time pressure on women can reduce these gendered health inequalities.

Based on the policies described above, the hypothesis of our review was that European social democratic welfare regimes and countries with family dual-earner family models best promote women's health and reduce gender inequalities in health due to the support they provide for men and women's participation in paid as well as unpaid work and sharing of family care work. Moreover, the specific gender equality policies described above and summarized in Figure 1 will promote improved health outcomes.

**MATERIALS AND METHODS**

We conducted a literature search using the following databases: Medline; Web of Science (Science Citation Index and Social Sciences Citation Index); Gender Studies Database; ProQuest databases (Applied Social Sciences Index and Abstracts (ASSIA), International Bibliography of the Social Sciences (IBSS), Public Affairs Information Service (PAIS) International, ProQuest Dissertations & Theses (PQDT), and Sociological Abstracts); PolicyFile; Embase (via Ovid); and Evidence-Based Medicine (EBM) Reviews. The search was performed in December 2012 and included papers written in English, French, Spanish, Portuguese, or Italian and published from 1970 to the search date. Subject headings and keywords included in the search are listed in Appendix Table 1, although the search was slightly modified depending on the database used; for example, gender terms were omitted when searching the Gender Studies Database. Terms were generally combined with the Boolean operator AND, that is, Policy terms AND Gender terms AND Health terms. These searches were developed in consultation with, and carried out by, a medical librarian trained in performing systematic reviews. The search produced a total of 1,238 unduplicated studies (464 in Medline, 221 in Web of Science, 142 in the Gender Studies Database, 180 in the ProQuest databases, 47 in Policy File, 132 in Embase, 1 in EBM Reviews, and 155 from related citations in PubMed). This total number was divided among the coauthors so that each abstract was reviewed by 2 authors; ties were broken by a third author's review.

Inclusion criteria for an abstract to be considered further were that the study should consider gender equality policies, gender regimes, or welfare state regimes; compare policies across countries, states, or macro-administrative units within 1 country; analyze at least 1 health outcome or health behavior (e.g., alcohol consumption); and examine outcomes among women or compare them between genders.

On the basis of these criteria, a total of 48 full-text papers were reviewed, from which 15 were finally selected that really met the criteria defined above. A review of the references cited in these 15 papers yielded 4 more papers that fulfilled the selection criteria. Thus, 19 papers entered the study. It is worth mentioning that there were numerous articles documenting gender inequalities in political, social, and economic determinants at the area level and their relationship with health outcomes. However, as they did not refer to policies specifically, we did not include them.

To accomplish our second review objective, from the same set of abstracts we also selected articles that focused specifically on parental leave in relation to women's health status or health behavior. We identified 10 articles focused on parental leave, including 1 systematic review. We retrieved 7 more articles through a review of the references of the 10 articles and author searches based on the names of the authors that were references in the 10 papers.

**RESULTS**

Results are structured in 2 sections. In the first section, we introduce the papers found in relation to the first objective, which was to examine the influence of macrosocial policies on women's health or gender inequalities in health. In the following section, we discuss the papers found on the specific policy chosen, namely, the relationship between parental leave and women's health outcomes.

The influence of macrosocial policies on women’s health or gender inequalities in health

Table 1 shows the main characteristics of the 19 papers selected to meet our first objective. Most were published after the year 2000. Six papers analyzed 2–4 countries, 4 analyzed between 13 and 22 countries, and the other 9 compared US states. The majority of papers used an individual design only (8 papers) or individual design with a multilevel approach (7 papers), and 4 used an ecological design where data on policies and indicators of health outcomes at the state level are correlated. The policies analyzed included country classifications regarding welfare state policies (3 papers), family policy models (3 papers), and gender regimes (1 paper), but also more specific policies, such as toward reproductive rights (7 papers). The most often analyzed outcome was self-rated health (7 papers). Only 4 papers analyzed gender inequalities, while 6 of them focused on women’s health; the other papers focused on women as mothers (4 papers) or on the health of men and women separately, without analyzing gender inequalities (3 papers).
Table 1. Description of the Papers Included in the Review

<table>
<thead>
<tr>
<th>Year of publication</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980–1989</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>1990–1999</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>2000–2009</td>
<td>10</td>
<td>52.6</td>
</tr>
<tr>
<td>2010–2012</td>
<td>6</td>
<td>31.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of countries</th>
<th>Unit of analysis</th>
<th>Outcomes</th>
<th>Comparison groups</th>
<th>Policies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (states within the country compared)</td>
<td>Individual</td>
<td>Self-rated health (alone or with LLI)</td>
<td>Men and women (gap)</td>
<td>Welfare state</td>
<td>9</td>
</tr>
<tr>
<td>2–4</td>
<td>Ecological</td>
<td>Mortality</td>
<td>Men and women (separate)</td>
<td>Family policy model</td>
<td>6</td>
</tr>
<tr>
<td>5–25</td>
<td>Multilevela</td>
<td>Health behaviors</td>
<td>Women</td>
<td>Gender regime</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Variables related to mental health</td>
<td>Lone and couple mothers</td>
<td>Reproductive health policy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
<td>Couples</td>
<td>Others</td>
<td>2</td>
</tr>
</tbody>
</table>

Abbreviation: LLI, limited long-standing illness.

a In general, individuals and countries, but in one case, countries and years.

Welfare state policies. The 3 papers analyzing welfare state policies (52–54) are presented in Table 2. All of these had an individual cross-sectional design. The number of countries analyzed ranged from 2 to 13 and included Britain and Finland (which appeared in all the papers), 11 other European countries (which appeared in a sole paper), and Japan. Two of the papers analyzed self-rated health (in 1 case together with limited long-standing illness), and 1 studied mental health. One of the papers assessed the gap between men and women, another analyzed men and women separately, and 1 studied women only. Bambara et al. (52), comparing the self-assessed health among men and women living under various types of welfare regimes, found that women in social democratic and southern welfare states (quite far apart in terms of welfare-state arrangements) are more likely to report worse health than men, although this does not seem to be the case in countries classified as corporatist or liberal (52). Meanwhile, Chandola et al. (53), after analyzing the relationship between work-family conflicts and mental health, concluded that Finland’s family-friendly work policies are contributing to lower levels of conflict and better mental health among Finnish working women compared with working women in Japan. Finally, Lahelma et al. (54) analyzed health status by family type (couple mothers with children and couples without children, divorced lone mothers, single lone mothers, single women) and found that lone mothers had worse health than other women, probably explainable via the multiple attachment hypothesis (having financial problems and less social support). Comparing Britain and Finland, they found that a greater part of the health disadvantage of lone mothers in Britain was explained by structural characteristics.

Gender regimes and family policy models. Table 3 describes the 4 papers examining gender regimes or family policy models (55–58). The only paper on gender regimes analyzed longitudinal data with a multilevel approach: First-level units were years, and second-level units were 22 countries of the Organization for Economic Cooperation and Development (OECD). The other 3 papers were cross-sectional with an individual basis. Two of these papers analyzed 3 countries (Italy, Sweden, and Britain), while the other examined 18 European countries. Outcomes under consideration were mortality, self-rated health (accompanied, in 1 of the 2 cases, by limited long-standing illness), and well-being. One paper studied the gap in mortality between men and women, 1 paper analyzed men and women separately, and the other 2 compared lone and couple mothers.

The paper examining gender regimes analyzing the data of 22 countries showed that the most gender-egalitarian welfare-state approach, called the earner-carer model, presents smaller gender differences in mortality by external causes, mainly due to an association with increased female mortality (55). Boye et al. (56) analyzed 18 countries and showed that a traditional family policy model presents the most positive association between women’s well-being and both paid and housework hours, while in the market-oriented model, women’s paid and housework hours are associated with decreasing well-being, the former association appearing to be caused by work-family conflict. The papers that compared the health of lone versus couple mothers showed that, in general, the health of lone mothers was worse than that of couple mothers, and that this was true regardless of the family policy model (57, 58). However, 1 paper (58) found that this association was lower for Italy, which operates a traditional family policy model. In addition, 1 study found that the prevalence of lone motherhood and the characteristics of that population (e.g., teen mothers vs. older widowed mothers), joblessness rates, poverty, and health status all varied across countries with different family policy models (57), and that Sweden’s dual-earner model, together with its generous family benefits, protected mothers in general and lone mothers in particular from the degree of poverty experienced elsewhere.

Reproductive policies. The 7 papers that examined reproductive policies (59–65) are presented in Table 4. One of these, considering 22 countries worldwide and using a multilevel approach, analyzed the effect of an index of reproductive...
<table>
<thead>
<tr>
<th>First Author, Year (Reference No.)</th>
<th>Study Aim</th>
<th>Design, Unit of Analysis, and Type of Areas</th>
<th>Policy</th>
<th>Outcome</th>
<th>Groups Examined</th>
<th>Other Variables</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bambra, 2009 (52)</td>
<td>To examine the association between gender and self-assessed health in different welfare-state regimes</td>
<td>Individual cross-sectional 13 European countries</td>
<td>Welfare-state regimes: social democratic (Denmark, Norway, Sweden, Finland, Holland); corporatist (Belgium, France, Germany); liberal (England, Ireland); and southern (Italy, Spain, Portugal)</td>
<td>Self-rated health</td>
<td>Gap between men and women</td>
<td>Educational status is used as a stratification variable</td>
<td>Women in the social democratic and southern welfare states were more likely to report worse self-assessed health than men. In the corporatist and liberal (Ireland) countries, there were no gender differences in self-assessed health. In Finland and England, men had poorer self-assessed health than women.</td>
</tr>
<tr>
<td>Chandola, 2004 (53)</td>
<td>To examine whether work-to-family and family-to-work conflicts explain the effect of role strain on mental health among men and women public employees of different welfare states</td>
<td>Individual cross-sectional 2 cities and 1 area: London (United Kingdom), Helsinki (Finland), and the West Coast of Japan</td>
<td>Welfare-state policies</td>
<td>Mental health (SF-36 mental health component)</td>
<td>Men and women (separate)</td>
<td>Multiple roles as a measure of role strain, work-to-family conflict, family-to-work conflict scales</td>
<td>Work-to-family and family-to-work conflicts explain the effect of role strain on mental health in the 3 countries. The family-friendly work policies in Finland may contribute to its lower levels of both types of conflicts and better mental health, especially for women. The poorer mental health of working Japanese women could be attributable to their higher levels of both types of conflicts.</td>
</tr>
<tr>
<td>Lahelma, 2002 (54)</td>
<td>To examine whether the multiple-burden hypothesis and the multiple-attachment hypothesis explain health variations between British and Finnish women and also to assess if variations are due to socioeconomic status, educational level, and income</td>
<td>Individual cross-sectional 2 countries: Britain and Finland</td>
<td>Welfare-state policies</td>
<td>Self-rated health and limiting long-standing illness</td>
<td>Women according to family type</td>
<td>Family type (couple with children, couple without children, divorced lone mother, single lone mother, single), employment status, education, income</td>
<td>Women living in 2-parent families with children had better health than women living in other family structures. In Britain, the disadvantaged social position of lone mothers accounts for a greater proportion of their poor health than in Finland.</td>
</tr>
</tbody>
</table>

Abbreviation: SF-36, 36-item Medical Outcomes Study Short-Form General Health Survey.
autonomy and the context of violence against women on the gap in frequency of drinking between men and women. The remaining 6 papers compared the 50 US states. These were either ecological or individual analyses using a multilevel approach. They used indices measuring reproductive rights, and the common policies and indicators considered in these indices covered several dimensions: support by governors and legislatures for bans or restrictions on abortion; state funding for abortion; state-mandated coverage for contraception and infertility treatment; access to abortion for minors without parental notification; mandatory waiting periods for abortions; the percentage of women living in counties with at least 1 abortion provider; legality of same-sex couple adoption; mandatory sexual education; prochoice government in the state; and state requirements for private insurers to cover Papanicolaou and cervical cancer screening and chlamydia screening. One of the papers also analyzed policies in the economic, access to care, and community domains (65).

Diverse outcomes were assessed by this set of papers, including depressive symptoms, self-rated health, mortality, and alcohol consumption, and they were mainly focused on women’s health. Results showed that policies related to reproductive rights were not associated with women’s self-rated health or mortality (61, 62), although 1 paper found an association with breast cancer and infant mortality (65). On the other hand, an association was found between such policies and lower levels of women’s depressive symptoms (60), prevalence of major depression and posttraumatic stress (63), and lower levels of alcohol consumption among men and women (64). Moreover, study participants in US states with more family-planning policies had fewer days described as “not good” in terms of mental health (65). However, the paper that compared countries worldwide did not find an association between reproductive rights or context of violence and the gap in drinking between men and women in private settings, and in public settings the associations were found only when gross domestic product was not included in the statistical models (59). It is worth mentioning that the majority of these studies also analyzed indices of gender equality. They found an association between these indices and better health outcomes. For example, in the drinking study, the indices predicted smaller gender differences in drinking, mainly in public settings (59).

**Other policies.** The last table, Table 5, shows the papers in our review that analyzed an amalgam of different policies and policy contexts (66–70), including the following: social transfers received by mothers; policy frameworks targeting lone mothers; policies in 6 different domains (economic security, access to health insurance and services, protection for the insured, health education and supplies, antidiscrimination, and smoking); and the legal dimension of the “Status of Women Index,” which includes laws related to equality in paid and unpaid work and rape conviction and which is combined with 3 other dimensions of the Status of Women Index. The outcomes under analysis were also diverse, including self-rated health and long-standing limiting illness, as well as obesity, high blood pressure, diabetes and smoking, and violence against women. Two papers compared 2 countries (Canada and Norway; Britain and Sweden), and the other 3 analyzed US states.

One of the papers analyzing lone and couple mothers found that the health status of lone mothers was worse than that of married mothers in Canada but not in Norway, and that giving Canadian mothers transfers similar to those offered in Norway would provide significant gains in both the socioeconomic status and the health status of lone mothers (66). Meanwhile, Whitehead et al. (67) found that the health of lone mothers was worse than that of couple mothers in both Sweden and Britain, although the pathways leading from lone motherhood to poor health varied between these countries: Sweden’s more favorable social policies have protected lone mothers from poverty and insecurity in relation to the labor market to a much greater degree. The remaining 3 papers were conducted in the US states. Results showed that antidiscrimination policies (including domestic violence and sexual assault policies) were related to decreased high blood pressure, smoking, and obesity among women (68). In addition, the above-mentioned legal dimension of the Status of Women Index was negatively correlated with violence in women, and the Status of Women Index had a curvilinear relationship (violence increases in states with a low and high index) (69). Moreover, in another study, an interaction took place between gender inequality at the state level (also using the Status of Women Index), inequality in the couple, and violence against wives (70).

**A specific example: parental leave and women’s health**

In this section, we summarize the papers on the effects of the length of parental leave on maternal health or health behaviors (71–87). While most countries have some sort of parental leave policy (88), countries (and jurisdictions within countries) differ in the length of this leave. As a consequence, researchers have focused mainly on length of leave rather than on its presence or absence.

Research into mental health in the postpartum period is extensive. With regard to the relationship between this issue and maternity leave, findings from cross-sectional (76, 79), as well as longitudinal (71, 78, 80), studies consistently associate longer leave with reductions in depressive symptoms. In the United States, Chatterji and Markowitz (71) found that taking more than 12 weeks of maternity leave would reduce maternal depressive symptoms on the Centre for Epidemiologic Studies Depression Scale by 15%. In addition, extending paid leave over 8 weeks would increase the probability of reporting excellent health by 3.5 percentage points. Similar findings regarding postpartum depressive symptoms were obtained by using data from the 1988 National Maternal and Infant Health Survey (79). However, a study based on the Wisconsin Maternity Leave and Health Project did not observe a relationship between length of leave and mental health (84).

It is important to note that leave lengths are shorter in the United States than in Canada and most European countries. This raises questions about nonlinear effects and the impact of optimal parental leave length on various outcomes in mothers, fathers, and children. For example, McGovern et al. (76) found that, in the United States, maternal mental health had a U-shaped association with time off work and that the positive effect of time off work on mental health was observed to begin at 15 weeks postpartum, when only 15% of mothers were still on maternity leave.

Findings regarding maternity leave in relation to overall maternal health status are less consistent. Self-reported health status has also been shown to improve with longer maternity
<table>
<thead>
<tr>
<th>First Author, Year (Reference No.)</th>
<th>Study Aim</th>
<th>Design, Unit of Analysis, and Type of Areas</th>
<th>Policy</th>
<th>Outcome</th>
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<th>Other Variables</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhans, 2012 (55)</td>
<td>To examine the association between gender policy and the gender gap in external causes and circulatory disease mortality</td>
<td>Multilevel longitudinal, with years at level 1 and countries at level 2 (22 OECD countries)</td>
<td>Gender regimes: male breadwinner, earner-carer, compensatory breadwinner, and universal citizen. Specific policies also analyzed</td>
<td>External cause and circulatory disease mortality</td>
<td>Gap between men and women</td>
<td>Gender equality measure, gross domestic product, Gini coefficient, health behaviors</td>
<td>Earner-carer cluster and policies characteristic of that cluster are associated with smaller gender differences in external causes, because of an association with increased female mortality.</td>
</tr>
<tr>
<td>Boye, 2011 (56)</td>
<td>To examine associations between well-being and paid work and housework in different European family policy models</td>
<td>Cross-sectional analysis of individuals in 18 European countries</td>
<td>Korpi typologies of family policy models: dual earner (Denmark, Finland, Norway, Sweden), traditional (Austria, Belgium, France, Germany, Netherlands), market oriented (Ireland, Switzerland, United Kingdom), contradictory (dual earner: Estonia, Slovenia; traditional: Czech Republic, Slovakia; and contradictory: Hungary, Poland)</td>
<td>Well-being index</td>
<td>Men and women (separate)</td>
<td>Paid work hours, housework hours, work–family conflict</td>
<td>The traditional family policy model shows the most positive association between the women’s well-being and paid working hours, when work–family conflict is taken into account, and also with housework hours. The market-oriented model shows women’s paid working hours and housework hours are instead associated with decreasing well-being.</td>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Burström, 2010 (57)</td>
<td>To examine welfare state arrangements and social policy, living conditions, and health among lone and couple mothers in 3 contrasting policy environments</td>
<td>Cross-sectional analysis of individuals 3 countries: Italy, Sweden, and Britain</td>
<td>Family policy model: dual earner (Sweden), market oriented (United Kingdom), and traditional (Italy)</td>
<td>Self-rated health and limiting long-standing illness (only Sweden and Britain)</td>
<td>Gap between lone and couple mothers</td>
<td>Socioeconomic position based on occupation, low-income household, unemployment</td>
<td>Italian lone mothers were older than their Swedish and English counterparts and less prevalent. Lone mothers had worse health than couple mothers in all countries. The dual-earner family policy model, together with the generosity of family benefits, has protected Swedish mothers in general and lone mothers in particular from poverty.</td>
</tr>
<tr>
<td>Fritzell, 2012 (58)</td>
<td>To analyze the relationship between self-rated health and nonemployment and their potential synergistic effects among lone and couple mothers in different family policy categories</td>
<td>Cross-sectional analysis of individuals 3 countries: Italy, Sweden, and Britain</td>
<td>Family policy model: dual earner (Sweden), market oriented (Britain), and traditional (Italy)</td>
<td>Self-rated health</td>
<td>Gap between lone and couple mothers</td>
<td>Employment status, socioeconomic characteristics, smoking</td>
<td>Lone motherhood was associated with increased risk of poor health in Britain and Sweden but less in Italy. Unemployment only marginally contributed to the excess risk of poor health.</td>
</tr>
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</table>

Abbreviations: Gini coefficient, the most commonly used measure of inequality in the distribution of family income; OECD, Organization for Economic Cooperation and Development.
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</tr>
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<tbody>
<tr>
<td>Bond, 2010 (59)</td>
<td>To examine the association between country-level gender equality and differences in the frequency of women’s compared with men’s drinking</td>
<td>Multilevel cross-sectional, with individuals at level 1 and countries at level 2 22 countries in Europe (n = 8), the Americas (n = 7), Asia (n = 3), Oceania (n = 2), and Africa (n = 2)</td>
<td>Index of women’s reproductive autonomy (including abortion laws, maternity leave) and context of violence against women (including legislation and other activities to address violence against women)</td>
<td>Frequency of drinking in public and private settings</td>
<td>Gap between men and women</td>
<td>Gender equality at the country level: gender empowerment measure, the GGI, GGI education, and GGI political participation subindices  Economic status: gross domestic product and human development index of the country  Age, gender, and marital status at the individual level</td>
<td>Neither of the 2 indices predicts gender differences in the frequency of drinking in public or private settings in the model adjusted by gross domestic product; however, in nonadjusted models, more reproductive autonomy and less violence against women predicted smaller gender differences in drinking in public settings.</td>
</tr>
<tr>
<td>Chen, 2005 (60)</td>
<td>To analyze the association between state-level women’s status and women’s depressive symptoms</td>
<td>Multilevel cross-sectional, with women of reproductive age at level 1 and states at level 2 The 50 US states</td>
<td>Composite index measuring reproductive rights</td>
<td>Depressive symptomatology (CES-D Scale)</td>
<td>Women</td>
<td>3 other indices measuring women’s political participation, employment, and earnings, as well as economic autonomy at the state level. Gini coefficient. Individual variables</td>
<td>Women living in states guaranteeing more reproductive rights had lower levels of depressive symptoms. Indices of employment and earnings, as well as economic autonomy, were also associated with lower levels of depressive symptoms.</td>
</tr>
<tr>
<td>Jun, 2004 (61)</td>
<td>To examine the association between state-level women’s status and women’s health</td>
<td>Multilevel cross-sectional, with women at level 1 and states at level 2 The 50 US states</td>
<td>Composite index measuring reproductive rights</td>
<td>Self-rated health</td>
<td>Women</td>
<td>3 other indices measuring women’s political participation, employment, and earnings, as well as economic autonomy. State median income, income ratios of top and bottom 20%. Individual variables</td>
<td>Reproductive rights were not associated with self-rated health.</td>
</tr>
<tr>
<td>Kawachi, 1999 (62)</td>
<td>To analyze the association between state-level women’s status and men’s mortality and morbidity rates</td>
<td>Ecological, cross-sectional The 50 US states</td>
<td>Composite index measuring reproductive rights</td>
<td>Total mortality rates, cause-specific death rates, mean days of activity limitations, infant mortality</td>
<td>Men and women (separate) for total mortality rates; women for the cause-specific rates and limited activity</td>
<td>3 other indices measuring women’s political participation, employment and earnings, and economic autonomy. Gini coefficient, median household income, and poverty rates</td>
<td>The reproductive rights index was the only index that was not associated with women’s total mortality or any specific cause of death except infant mortality. Associations were not found with activity limitations.</td>
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Table continues
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<tr>
<th>First Author, Year (Reference No.)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>McLaughlin, 2011 (63)</td>
<td>To analyze the associations between state-level women's status and women's mood and anxiety disorders and gender inequalities in the presence of the disorders</td>
<td>Multilevel cross-sectional, with women at level 1 and states at level 2 The 50 US states</td>
<td>Composite index measuring reproductive rights</td>
<td>Presence of mood and anxiety disorders</td>
<td>Women and gap between men and women</td>
<td>3 other indices measuring women's political participation, employment and earnings, and social/economic autonomy, individual variables</td>
<td>Women living in states with greater reproductive rights had lower 12-month prevalences of any mood disorder and specifically major depression and also of 1 anxiety disorder (post-traumatic stress). Gender inequalities were not associated with reproductive rights. Other indices were not related with mood and anxiety disorders.</td>
</tr>
<tr>
<td>Roberts, 2012 (64)</td>
<td>To examine the associations between state-level women's status and alcohol consumption by women and men</td>
<td>Multilevel cross-sectional, with women at level 1 and states at level 2 The 50 US states</td>
<td>Composite indices measuring policies of violence against women and reproductive rights</td>
<td>5 alcohol consumption measures</td>
<td>Men and women (separate)</td>
<td>3 other indices measuring women's political participation, women's socioeconomic status, and gender equality in socioeconomic status. Income inequality and religion. Individual variables.</td>
<td>Nearly all associations between reproductive rights or violence policy and alcohol consumption were either negative or nonsignificant in adjusted models. All other associations between gender equality and alcohol consumption were either negative or nonsignificant.</td>
</tr>
<tr>
<td>Wisdom, 2005 (65)</td>
<td>To examine the associations between state-level policies related to women's health and women's health outcomes</td>
<td>Ecological, cross-sectional The 50 US states</td>
<td>Policies in 4 domains: reproduction, economic security, access to care (Medicaid eligibility and efforts to expand Medicaid), and community (environmental health and violence against women)</td>
<td>Mortality rates for heart disease, lung cancer, stroke, and breast cancer, as well as infant mortality Mental health</td>
<td>Women</td>
<td>Percentages of population African American and also Hispanic, percentage of women in poverty, and average earnings</td>
<td>Access to care and community were most strongly associated with health outcomes. Reproductive issues were related to breast cancer and infant mortality. Better mental health was associated with policies related to violence against women, economic security, and family planning.</td>
</tr>
</tbody>
</table>

Abbreviations: CES-D, Center for Epidemiologic Studies Depression; GGI, Global Gender Gap Index; Gini coefficient, the most commonly used measure of inequality in the distribution of family income.
<table>
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<tr>
<th><strong>First Author, Year (Reference No.)</strong></th>
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<th><strong>Key Findings</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Curtis, 2004 (66)</td>
<td>To investigate the potential health consequences of giving Canadian mothers the social transfers available in Norway</td>
<td>Individual cross-sectional 2 countries: Canada and Norway</td>
<td>Probability of receiving transfers (for Canadian mothers; all Norwegian mothers receive them) and level of transfers received</td>
<td>Self-rated health</td>
<td>Gap between lone and couple mothers</td>
<td>Household income, percentage of income in form of transfers, employment status. Other: marital status, age, number of children, maternal education, smoking, exercise</td>
<td>Health status of lone mothers is worse than that of married mothers in Canada but not in Norway. Giving Canadian mothers Norwegian transfers would provide significant gains in socioeconomic and health status of lone mothers.</td>
</tr>
<tr>
<td>Whitehead, 2000 (67)</td>
<td>To perform a comparative analysis of social policies and their points of potential impact on the pathways leading from lone motherhood to ill health in Britain and Sweden</td>
<td>Individual cross-sectional 2 countries: Britain and Sweden</td>
<td>Policy context in relation to lone parents</td>
<td>Self-rated health, long-standing limiting illness</td>
<td>Gap between lone and couple mothers</td>
<td>Poverty, employment status, age, ethnicity</td>
<td>Lone mothers had poorer health than couple mothers, and the difference is similar in Sweden and Britain. However, more favorable social policies in Sweden have protected lone mothers from poverty and insecurity in the labor market to a higher degree.</td>
</tr>
<tr>
<td>Wisdom, 2008 (68)</td>
<td>To examine the association between state-level policies related to women’s health and obesity, diabetes, high blood pressure, and smoking in women</td>
<td>Ecological cross-sectional The 50 US states</td>
<td>Policies in 6 domains: economic security, access to health insurance and services, protection for the insured, health education and supplies, antidiscrimination, smoking</td>
<td>Obesity, high blood pressure, diabetes, and smoking</td>
<td>Women</td>
<td>Percentage of population African American and also percentage of Hispanic, percentage of women in poverty, average earnings</td>
<td>In general, state-level policies were associated with the outcomes. Antidiscrimination policies were associated with 3 outcomes: high blood pressure, smoking, and obesity.</td>
</tr>
<tr>
<td>Yllö, 1983 (69)</td>
<td>To analyze the association between the status of women and intimate partner violence beating in each American state</td>
<td>Ecological cross-sectional 30 US states</td>
<td>Legal dimension of the Status of Women Index (laws for equal rights for men and women)</td>
<td>Proportion of couples who indicated that the husband had used violence against his wife (and also wife against husband)</td>
<td>Individuals living with a person of the opposite sex</td>
<td>3 other dimensions of the Status of Women Index: economic, educational, and political. Violent crime, urbanization, education, state per capita income</td>
<td>The correlation between legal status and violence against women was negative and almost statistically significant. In addition, the index of women’s status had a curvilinear relationship with violence, which increased where the index was lowest and highest.</td>
</tr>
<tr>
<td>Yllö, 1984 (70)</td>
<td>To examine whether structured sexual inequality affects the relationship between marital inequality and intimate partner violence</td>
<td>Multilevel cross-sectional with individuals at level 1 and states at level 2 30 US states</td>
<td>Legal dimension of the Status of Women Index (laws for equal rights for men and women)</td>
<td>Proportion of couples who indicated that the husband had used violence against his wife</td>
<td>Individuals living with a person of the opposite sex</td>
<td>3 other dimensions of the Status of Women Index: economic, educational, and political. Type of couple: wife dominant, separate, shared, husband dominant</td>
<td>Violence against wives is most severe in families residing in high-status states but in which the husband dominates decision making. Also, wife beating seems to be high in wife-dominated couples residing in low-status states.</td>
</tr>
</tbody>
</table>
leave (71), but no associations were found with other measures, such as outpatient physician visits (79), clinical symptoms (81), backache, tiredness, or lack of sleep (82). A study evaluating the impact of the policies extending the parental leave in Canada in 2000 found that, following the reform, the health of women and depression did not change (75).

The effects of maternity leave may also vary according to maternal characteristics. Chatterji and Markowitz (71) noted that the positive effects of maternity leave were more pronounced among mothers who returned to work full-time and who were married and of non-Latino white ethnicity. Fathers’ leave may also impact on maternal health. Chatterji and Markowitz (71) found that married mothers whose spouses did not take any paternal leave had higher depressive symptoms than those whose spouses did.

Three Swedish studies that assessed gender inequality in the couples’ total share of parental leave found that women who took less than 20% of the couple’s total leave (i.e., at least 4 times less than their partners) were at higher risk of mortality and sickness absence compared with women in equal-couples relationships (40%–60% of total leave), but more traditional couples (women took the majority of the leave) also had increased risks (73). However, another study did not find associations for women when analyzing sickness absence and gender inequality in the private sphere, including sharing of leave (85). No association was found with alcohol harm for women, but fathers who took paternity leave ran a lower risk (74).

Two studies considered the effects of antenatal leave on delivery outcomes and found that antenatal leave and its duration reduce the odds of delivering by cesarean section and preterm delivery (77), as well as the presence of an intervention or complication during delivery (83).

Breastfeeding is known to be associated with better maternal and infant outcomes (89). In our search, a literature review found that longer maternity leave has been consistently associated with duration of breastfeeding in 4 studies in the United States (72). More recent studies confirm these findings. A longitudinal study (87) found a dose-response association between length of maternity leave and duration of breastfeeding. The study from Canada found that, following the reform of extending parental leave, the average length of breastfeeding increased over a month for eligible mothers and that the proportion of women attaining 6 months of exclusive breastfeeding increased (75).

**DISCUSSION**

The current body of evidence comparing country- or state-level gender policy regimes and women’s health or gender inequalities in health is small and limited by methodological challenges. The studies we reviewed covered several policies, ranging from analysis of state-level reproductive policies and violence-protection policies to welfare gender regimes and family support at the country level, covering only a small spectrum of gender equality policies described in the Introduction. Yet, with a few notable exceptions, the weight of evidence in this growing area of research suggests that policies intended to explicitly support women and families are associated with a variety of improved health outcomes for women or diminished gender inequalities in health. Our hypothesis that Nordic social democratic welfare regimes and dual-earner family models promote mostly women’s health was partially supported by our review, especially regarding the health of mothers, although gender inequalities in self-rated health and a higher mortality risk for women were also found in these countries. The enforcement of reproductive policies, an issue mainly studied in the US states, shows associations with better mental health outcomes, although not with other outcomes. Taking longer paid maternity leave was also generally associated with better mental health and longer duration of breastfeeding, although cross-country comparisons were lacking in this field.

Several studies reveal better health among women in Nordic countries (53, 54, 57). This supports the literature emphasizing that it is the “dual-earner policy model”—the model supported by Scandinavian welfare states (37, 90)—that leads to better women’s health outcomes, as opposed to models that support the family in general (36, 38). In dual-earner models, public policies support women’s participation in the labor force and enforce more equitable sharing of responsibilities for unpaid work (caring and reproductive work within the family). For example, our review has shown that these models have protected lone mothers from poverty (57, 66, 67). Reduction in poverty, in turn, is a powerful promoter of health. However, it is worth noting that women still have the larger burden for unpaid work compared with men in these countries along with other gender inequalities, such as low political participation among women, gender-segregated employment, and lower pay for the same jobs (91).

Although we found just 1 article using a gender regime typology (55), its results highlight the benefits of using this approach or family policies models, as opposed to the broad category of welfare state regimes, prevalent in this field of inquiry, when studying women’s health (92, 93). Thus, our results also give credibility to the critiques of “black box” welfare state typologies that neglect policies, specifically gender policies (92, 93), and further support the benefits of linking welfare regime theory to specific gender policy instruments to understand their effect on women’s health. The consideration of other welfare state types (Asian, east European, Latin, US) represents a future challenge to the heuristics of these classifications with regard to the impact of welfare state type upon women’s health.

Many studies from the United States examined state-level policies and also compared the relationship between variations in support for gender equality or women’s well-being and rates of adverse outcomes, mostly using ecological analyses, with some studies taking a multilevel approach. Almost all of the US studies included here utilized national samples, such as the Behavioral Risk Factor Survey or the National Maternal Infant Health Survey, and linked these to state-level databases, such as the National Report Card on States, which evaluates policies supporting women, or to composite indices impacting women’s status published by the Institute for Women’s Policy Research. Across a range of outcomes (depressive symptoms, chronic conditions, mortality), gender equality or women’s autonomy had positive impacts on women’s health status, with a few exceptions. Three studies examining mental well-being provided contrasting findings. The studies examining depressive symptoms using the Center for Epidemiologic Studies Depression Scale (60) and the Behavioral Risk Factor Survey...
reports of number of days that mental health was “not good” (65) were influenced by state-level equality indices in the predicted direction. However, data on mood and anxiety disorders from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) reported by McLaughlin et al. (63) were not associated with state-level indices of women’s political participation, employment and earnings, or social/economic autonomy. Two US-based studies examined partner violence as an outcome (69, 70). These studies used data collected 3 decades before the most recent studies and may not be comparable to the rest, in part because of fewer public services available to victims at that time, as well as a completely different policy context from more contemporary studies.

In several, but not all, of the state-level studies that examined associations between reproductive policies and health outcomes, these associations were not established. Health outcomes evaluated in these studies ranged from self-rated health, depressive symptoms, and alcohol consumption to mortality. However, the 3 papers concerning mental health outcomes found positive associations analyzing depressive symptomatology (60), mood and anxiety disorders (63), and the number of days when mental health was “not good” (65). In these cases, mental health was better in the states guaranteeing better reproductive rights. A possible explanation of these findings can be that these policies can strengthen women’s autonomy in their reproductive decisions and therefore improve women’s life opportunities and achieve a better standard of living (60, 63). The literature on the impact on health of reproductive policies has an abundance of studies examining infant and birth outcomes that were not included here because this was a study of women’s health. That literature, however, may shed further light on whether and how reproductive policies impact population well-being.

With regard to the specific example of parental leave, evidence to date generally presents a positive portrait of its effect on maternal mental health and breastfeeding, while the evidence on physical health is less conclusive. However, not all the papers reviewed included a specific policy; they mainly compared length of maternal leave. Variability in the length of leave may be determined in part by policies at the state, county, or workplace levels. The literature on the effects of parental leave and maternal health is incipient, and, as such, the few studies were rather exploratory and based on self-reported measures. With a few exceptions (71, 87), longitudinal studies were conducted in the United States with small samples ranging from 141 to 436 mothers (78, 80, 81). Longitudinal designs with larger and representative samples and in diverse settings would be beneficial. We have not identified research using multilevel analyses to study parental leave, although these are most appropriate to draw inferences involving multiple units of analyses. Studies modeling nonlinear effects of length may help to establish the optimal length and inform decision making. A limitation of this literature is that we could find no studies analyzing leave among same-sex couples.

A variety of study designs were used in the studies reviewed. Earlier studies tended to use ecological designs (e.g., correlating state-level differences in the United States with women’s health outcomes), which are appropriate for generating hypotheses about how and why policies might impact upon population well-being. More recent studies use multilevel models, usually with secondary data, which are stronger in design as the policies and health outcomes are included in the statistical models at the appropriate “levels” and sample sizes are larger than those for ecological studies. In turn, hierarchical models take into account the similarity and thus dependence of observations within a group (e.g., country), and their estimations are more precise than those of individual models using ordinary least-squares regression (94). However, in this review, we did not find systematic differences in the results according to the type of approach used, but, as said before, the type of policies and outcomes analyzed are very heterogeneous. Ideal designs would include longitudinal studies spanning multiple years (i.e., before and after policy changes) to enable the study of lag times required for a policy to impact population well-being, but, unfortunately, only 1 article used longitudinal data, and it analyzed the evolution of gender inequalities in different gender regimes (55).

The tendency in the majority of articles is still to document associations, with few examining pathways or mechanisms by which policies impact health and well-being. One study, by Burström et al. (57), proposed hypotheses to conceptualize various pathways of influence for different types of policies on health and well-being and tested each pathway accordingly. The use of theory and testable hypotheses to guide examination of specific pathways as this article illustrated would strengthen the current evidence. Several studies also examined the impact of gender equality—promoting policies on men’s health, as well as women’s, or on subgroups of women, like lone mothers. This approach strengthens the evidence by showing whether policy impacts are specific to women or general to the population. However, only 4 studies (52, 55, 59, 63) analyzed gender inequalities in health. Although gender relations affect these inequalities via power inequalities, none of these studies took this into account. Meanwhile, only 1 study in the review (55) examined the relationship between regimes favoring gender equality (“earner-carer”) and the gender gap. Moreover, the intersectionality with other axes of inequality, such as social class or race, should also be emphasized, because policies should have different impacts on populations of different social classes or races (95).

Recent evidence is also emerging on the lag time of the impact of macrolevel policies (96), suggesting that future research should consider the time needed for impacts on population well-being to be felt. This is a gap in existing studies. In the area of parental leave, self-selection and longer benefits may be associated with unmeasured characteristics that confer protection for adverse outcomes: Future work could benefit from comparisons across countries with different policies.

Finally, as noted in Figure 1, the number and types of policies that influence gender equality are much broader than those covered in studies thus far. Future research should use strong study designs to capture the full range of macrolevel policies on gender inequalities, as well as on women’s and men’s health.

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We will present this review to the meeting of the Spanish Society of Epidemiology, Granada, Spain, in September 2013.

Conflict of interest: none declared.

REFERENCES


67. Wisdom JP, Michael YL, Ramsey K, et al. Women’s health policies associated with obesity, diabetes, high blood pressure,


(Appendix follows)
# Appendix Table 1. Search Terms in the Literature Research

<table>
<thead>
<tr>
<th>Policy</th>
<th>Gender</th>
<th>Health</th>
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<td>assistance”, “employment insurance”,</td>
<td>“maternal”, “women’s health”</td>
<td>“outcomes”, “quality of life”, “health”</td>
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<tr>
<td>“family allowance”, “family benefit”,</td>
<td>“gender gap”, “gender equality”, “gender</td>
<td>status indicators”, “health disparities”,</td>
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<tr>
<td>“family benefits”, “family policy”,</td>
<td>equity”, “gender disparity”, “gender</td>
<td>“health surveys”, “life expectancy”</td>
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<td>inequality”</td>
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<td>“gender policy”, “gender regime”,</td>
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<tr>
<td>“health policy”, “housing subsidy”,</td>
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<td>“maternity leave”, “old age assistance”,</td>
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<td>“parental leave”, “pension”, “policy”,</td>
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<td>“public assistance”, “public housing”,</td>
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