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Gender health and policies: the state of the art from exposure to solutions

R. SILIQUINI, S. CHIADÒ PIAT, E. VERSINO, M.M. GIANINO, D. MUTU, M. COSSUTTA[*], L. MANZOLI[**]
Department of Public Health, University of Torino; [*] Counsellor of the Ministry, Italian Ministry of Health;
[**] University of Chieti, Italy

Key words

Gender • Equity • Policies

Summary

Objective. *To synthesize the determinants of gender inequalities through a narrative review that: (i) describes gender related variables that can create different levels of health; (ii) describes key points that may assist in policy development and its reorientation towards gender differences; (iii) debates potential approaches in understanding gender issues.*
Methods. *Review of the international literature through online databases (Pubmed), search engines, publications and documents from "grey literature".*
Inclusion criteria: publications from 1997, English language; keywords used: gender based analysis; gender and public policy; women's health; gender differences; health policy; gender impact assessment. Among the 300 papers retrieved, 55 were selected for relevance.
Results. *We performed a narrative synthesis of the included literature, regarding: (i) gender differences and their determinants; (ii) elements for the changing; (iii) possible approaches; (iv) gender influences the pursuit of health and health care access through specific variables; (v) health policies can modify these variables only by a minimal percentage. These interventions should guarantee equity and allow efficient resources allocation. The gap between political announcements and real policy implementation remains unchanged. (vi) Standard approaches to the topic are not feasible due to the scarcity of a specific literature and the numerous cultural differences.*
Conclusions. *Gender analysis of policies suggests they can differently affect women in comparison to men. However, reforms, strategies and interventions introduced in the last two decades, have achieved a limited success towards better gender equality in health. The main aim is to attack the structural sources of gender inequity in the society.*

Introduction

At present, gender differences in health represent some of the biggest failures in public health and pose a pressing challenge for the future.
Despite life expectancy is increasing in all developed countries [1], men are gaining healthy years, while women are gaining years of "disability". A debate between biologists, clinicians and sociologists revolves around the paradox of lower mortality and higher morbidity rates in women compared to men. Are these differences biological, social or both? Biomedical research emphasizes biological differences, while social research emphasizes the different contribution of role and resources of male and female during the life [2, 3]. The debate began in the 1980s and continues today: many studies have demonstrated these differences disappear after adjustment for all the social variables and significant evidences suggest the influence of gender on health [4-6].
While biological differences are universal, social differences between male and female derive from imposed social roles that can change over time and vary across cultures [7-9]. Every society is divided into male and female and people belonging to one or another category are considered different. Even if gender difference presents different definitions within societies, the findings are consistent: subjects defined as "females" are mainly involved in family management, while subjects defined as "males" are identified as part of the public world and work force and they are responsible for the management of citizens' rights and duties [8, 9].
The gender, that is the social aspect of the sex, influences the health status. Some meaningful indicators underline the point:

- regarding cardiovascular diseases, a trend inversion with respect to the recent past is remarkable, especially in developed countries. Even if the morbidity rate among men is still higher, the rate among women is approaching the men's one for the increasing exposure to specific risk factors (smoking, hyperlipidity, hypertension, diabetes, poor nutrition). However, the higher mortality rate among women represents the most important finding [11, 12];
- regarding alcohol, tobacco and illegal substances, women's consumption is approaching the men's one, especially among adolescents [3, 14-16];
- self immune disorders affect women in more than 60% of cases [17, 18] and pregnancy can modify and worsen the case history of these diseases;
- women are more affected by psychiatric disorders: major depression, affective disorders, eating disorders, phobias, anxiety and panic attacks [19-21].

Many organizations and international institutions devote important research projects to this topic. In particular, World Health Organization (WHO) has several ambitious aims in order to reduce gender inequalities through specific programs, supporting also research and policy evaluation [22-27].
This paper aims to synthesize the determinants of gender inequalities through a literature review that:
1) identify and describe the gender related variables able to produce different levels of health;
2) identify and describe the key points that may assist in policy change and reorientation towards gender;
3) debate potential approaches.

Methods

In order to evaluate the effects of gender on health, the international literature regarding both determinants of gender inequalities and Gender Impact Assessment (GIA) experiences have been analysed. The majority of research involved the consultation of online databases (Pubmed), search engines, publications and "grey literature". The search strategy for online databases included the following terms:
- #1 Gender OR gender differences;
- #2 GIA OR health impact assessment;
- #3 1 AND 2;
- #4 policies;
- # 5 #1 and #4.

The search strategy for search engines included the following keywords:
- gender based analysis;
- gender and public policy;
- women health;
- gender differences;
- health policy;
- gender impact assessment.

Inclusion criteria have been the year of publication (from 1997) and English language.
The literature review identified more than 300 papers. After screening for relevance and quality, 55 of them were selected. They included original papers, reviews or reports coming from different organizations. Main characteristics of the included studies are summarized in Table I.
The review was performed by two reviewers independently (DM and EV) and a third reviewer (RS) solved the controversies. Due to the great heterogeneity of the retrieved papers, different quality criteria have been used. For original papers and reviews main criteria were internal and external validity of the study; for reports we focused on four key points that could provide useful suggestions for the planning of public health policies:
1) Is the background (issue, stakeholders) clearly defined?
2) What are the sex differences in this issue and is there any evidence to support such differences?
3) Are the activities and policies clearly described?
4) Is the impact of the activity evaluated?

Main causes of exclusion were:
- in general: lack of relevance;
- for original papers and reviews: high suspect of bias;
- for reports and grey literature: less than two criteria (key points) met.

Results

Gender differences and their determinants

Clearly, different social representations of gender can affect heath status. Gender influences the pursuit of health [28, 29] and health care access [30, 31] through specific variables, not substantially modified by health policies.
1) Women have lower access to health care in comparison with men [28, 32]. This is indisputably due to social reasons:
- the "shock absorber" role of the family [1];
- economic problems: women have a higher risk of unemployment;
- discrimination within the family: the allocation of economic resources favours health needs of men and the use of resources for women's health is based on the agreement of partner or other family members;
- economic barriers: females have lower access to family resources but, in the same time, they require more preventive interventions for reproductive health [33, 34].

2) According to the literature, females receive less benefits from primary and secondary prevention programmes due to:
- a lower (average) level of education and a consequent lower ability to understand the suggestions [35];
- a different psycho-social framework able to acknowledge only messages focused on impact that the non-adherence to a prevention programme (and a consequent lower level of health) may have on women's role within society [36];
- less time to dedicate to mass-media information due to the main role in family care [5, 6].

3) Nowadays, women fall ill with several diseases (i.e. cardiovascular diseases, lung cancer) that were traditionally exclusive of men and they present a different perception of symptoms with possible delay in diagnosis [5, 37, 38]. In addition, drugs used are not specifically tested on women [39].
4) Females suffer more from social inequalities. It is already well established that, in every society, including the ones with public and universal health services, lower classes suffer more from health problems [40]. Within lower classes women are the most affected. Smoking habits between 1980 and 2000 could be considered a significant example. The prevalence of women that smoke is constantly increasing and, using a stratification based on the level of education, a decrease in the prevalence of women who smoke in the population with a higher level of education and an increase in the population with a lower level are shown [41].

5) Globalization can have critical implications on reproductive health and women's rights. Liberalization and integration were different in different social classes and between males and females [42]. It is well ascertained that increased foreign investments have been related to an increased presence of females in the work force [43], with a consequent impoverishment of the productive conditions [44]. Moreover, the rapid change in employment status of men and women has influenced a different ability to pay services. Thanks to the increase in productivity ability, women became often fully responsible for the payment of children's education and health care [45]. Moreover, this increase has modified, quickly and disrupting the social equilibrium, the traditional role that women held in family management [46].
   Globally, women suffer more from the pressure due to increasing competitiveness in the market. They are more subjected to work uncertainty, limited opportunities of professional growth and unsatisfactory social benefits.

Elements for the changing

Gender inequalities in health should be addressed through interventions focused on groups representing a relevant supply of potential health. These interventions should guarantee equity and an efficient resources allocation.
Despite recent improvements, the gap between political announcements and real policy implementation remains unchanged [47]. Hardly any country and consequently very few agencies support properly the 'rhetorical policy' and the declared objectives about gender equity. They do not dedicate the required human and financial resources and the appropriate methods able to measure eventual progresses towards female empowerment [48].
Surely, there is an unavoidable methodological problem, because gender is an indicator of risk and can also be a risk factor. It's no accident that the gender related development index (GDI) and the gender empowerment measure (GEM) are included in the five most important indicators of human development [49]. These are composite indices that are able to extend and overcome the traditional meaning of development focused only on economic growth. The GDI (related to gender inequalities) measures the results achieved in the dimensions and variables of Human Development Index (HDI), combining normalized measures of life expectancy, literacy, educational attainment and GDP per capita for countries worldwide. It is claimed as a standard means of measuring human development – a concept that, according to the United Nations Development Program (UNDP), refers to the process of widening the options of persons, giving them greater opportunities for education, health care, income, employment, etc. However, the GDI considers also inequalities between women and men.
The GEM points out whether women have the opportunity to take active part in economic and political life. Therefore, it measures gender inequality in key areas of decision-making process. Table II shows the distribution of the two indices in countries at high human development (Tab. II a, b) [50].
The indices mentioned above are directly related to general policies. Women's health must be included in every policy and must have a central role in the decision making process.
The implementation of budgets specific to gender could easily demonstrate how all the policies, apparently neutral with respect to gender, may affect the economic and social status of males and females in a different way and it could also highlight the current discrepancies in opportunities between women and men.

Possible approaches

Standard approaches to the topic are not feasible due to the scarcity of a specific literature and the numerous cultural differences. However, international literature underlines the focus on some aspects.

1) The lack of attention toward women in biomedical research has to be taken into account.
   Gender influences not only the different health needs, the access to health care, the treatments and the related results, but also the contents and the processes of the health research [51, 52]. The vicious cycle produced by systematic errors in research places the gender at bottom of the health values scale.
   Some examples of the imbalances in research include:

- data representative for gender are not systematically gathered in the majority of ad hoc studies and largest survey systems [53-57];
- the research methodology is not always sensible enough to point out the different dimensions of inequality. For instance, women could be thought less affected by a disease because they have less access to some health services [58-60];
- in the clinical controlled trials aimed to evaluate drugs efficacy, the representation of men and women is unequal. The rationale for the partial exclusion of women from the research refers the hormonal variations (uncontrollable and consequently potential source of bias) and the concern about adverse effects of experimental treatments on fertility or on pregnancies occuring during the study follow-up [61]. Despite the clear and often unavoidable limits due to women's exclusion from trials, the results from studies on men are frequently generalized to women. Although many efforts have been performed in the last ten years [62, 63], not all the Ethical Committees decisions are based on this principle;
- the unequal representation of women in the scientific community and in ethical and scientific committees, along with the different treatment that females scientists receive from the scientific community, are recognized as factors influencing gender bias in research [64, 65]. Despite a WHO resolution "Employment and participation of women", women's under representation reflects a gender hierarchy that is diffused also in the research field [39].

2) Defining more accurately and putting into practice health services oriented towards gender differences should be recommended.
   In the last two decades a strong international impetus towards the health systems reforms was observed. These reforms have been oriented towards the improvement of efficiency, equity and efficacy in a contest of resource scarcity and rapid demographic and technological modifications. The biggest reforms have included a range of measures such as decentralization, privatization, management improvement and definition of priorities [66]. Some studies [67] that have carried out gender analysis, have proved that several reforms have a different impact in men with respect to women, due to their different status of users and producers in the health system. For instance, there are many differences in the utilization of general and specialized medical care. Women use more frequently general care, while men specialized one.
   Despite these evidences, the consequences that reforms have on gender equity are rarely taken into account during their planning [68]. Therefore, a strong commitment towards the collection and analysis of gender-specific data should not be further delayed:

a) the implementation of gender-specific budgets has to be performed. It could clearly show that all policies, apparently neutral with respect to gender, can affect economic and social conditions of male and female populations in different ways.
b) The collection of gender-specific data, including sociodemographic indicators (education, income, occupation, properties and so forth), has to be performed both in single research projects and in regional and national systematic surveys [69].
   A good example of gender-specific data registration comes from Sweden, where all the official statistics are disaggregated by gender in order to integrate a gender perspective into every political sector, with the inclusion of health and research [70].
   Including gender differences analysis could have a great impact on the efficiency of services for at least five important repercussions [7]:
   - identification and consequent treatment of underrepresented groups;
   - epidemiological understanding of health problems;
   - knowledge of psycho-social aspects of disease;
   - the importance of public system;
   - larger participation of citizens towards promotion of healthy lifestyles and diseases control activity.

3) In order to better address the investigation of the paradox of "gender health", the understanding of gender and sex differences and their interactions is required [2]. The researchers should investigate social and biological factors simultaneously. Separating the research in biomedical and social fields, the researchers, and consequently the policy makers, keep separated the health models, with a potential misunderstand of complex processes of interaction between biological and social variables. This problem does not allow to test simultaneously different hypothesis on health determinants and consequently it delays the circulation of useful information about the health of men and women and consequently the reduction of gender inequalities.
4) It's no accident that the level of education influences the social welfare [35]. Some studies showed that a higher level of education in women can increase family health status, children healthy living and future investments on them [1]. Every year of education lost by women is estimated turn into a loss of 10-20% in future family income [71]. Moreover, people with a low level of education have 1.5 to 3 times chance to be unhealthy [72]. For females the achievement of a compulsory education level is not sufficient to provide knowledge and skills in order to improve and maintain health status and economic autonomy. On the other hand, higher levels of education provide females the ability to challenge "gender rules". In particular, women can be empowered to take a stand against domestic violence and be given the opportunity to start their own family well on in years, with unquestionable repercussions on their children's life and education [42].
   Social policies supporting longer female *curricula studiorum* can strongly influence the ability to develop an individual empowerment that can turn in community empowerment. The education system may have an important role. In particular, the contents, the quality and importance of subjects have to be improved through reforms, teachers training and any other intervention able to make education as an instrument for the modification of behaviours, beliefs and social rules that support discrimination and inequalities.
   More specifically, a recent WHO's Report [27] pointed out the effectiveness of programmes seeking to engage males and boys in achieving gender equality and equity in health, but most of the programmes are small scale and short in duration.
   So further efforts are necessary to improve the effectiveness of such programs particularly long-term, finding out the operating strategies of the programmes that have been able to scale up or sustain themselves. Finally, we should ask ourselves what kinds of structural changes and policies could lead to large-scale change in men and masculinity.

Discussion

Gender analysis of policies suggests they can differently affect women in comparison to men, because of different needs, different social and cultural integration, economic vulnerability and larger participation of women as health care providers [43, 66, 67, 73-77].
However, reforms, strategies and interventions introduced in the last two decades, have obtained limited results towards a better gender equality on health [77].
Nevertheless, some successes, promising policies, interventions and actions useful for the future can be listed.
The acknowledgement of different needs of the women, sanitary pathways more oriented to promote care and

prevention access, ad hoc non-health policies able to promote educational, cultural and social equity should be recommended.

The main aim must be the attack of the structural sources of gender inequity in the society, considering gender differences in every public and private activity through a systematic analysis of the plan and impact of all the policies and services.

Analysing international literature [3, 78, 79], it is already well established that a commitment in health system, strictly tied to few identified determinants, can only have minimal effect on health [80].

It is strongly recommended that every political decision able to influence (directly or indirectly, short or long-term) the health status has to consider the different impact on genders.

In fact, besides a "humanitarian" reason [80], social and economic reasons related to the important role of women in the overall management of health support the health equity.

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Tab. I. Characteristics of the 55 included studies.

Study	Study design	Population	Objectives	Main results
Agren, 2003	Report	Sweden	Description of the Swedish new public health policy	Goals - Participation and influence in society - Economic and social security - Secure and favourable conditions during childhood and adolescence - Healthier working life - Healthy and safe environments and products - Health and medical care that more actively promotes good health - Effective protection against communicable diseases - Safe sexuality and good reproductive health - Increased physical activity - Good eating habits and safe food - Reduced use of tobacco and alcohol, a society free from illicit drugs and doping and a reduction in the harmful effects of excessive gambling
Begum, 2001	Cross sectional	Bangladesh	To assess gender differences in access to tuberculosis diagnosis and in tuberculosis treatment outcome in Bangladesh	Women in Bangladesh appear to have less access to public out-patient clinics than men, and if they present with respiratory symptoms they are less likely to undergo sputum smear examination. If examined, women are less likely than men to be smear positive No gender bias was observed in tuberculosis treatment outcome. It is recommended to focus further research on exploration of sex differences in the incidence of respiratory conditions, identification of constraints among women in accessing out-patient clinics and verification of the quality of sputum submitted by women for examination
Bird, 1999	Editorial	N/A	To discuss the need of integrating social and biological research to improve men's and women's health	It is critical to promote research that will yield new insight into gender differences in health by integrating clinical, social and public health perspectives
Caron, 2006	Report	Western countries	To discuss governmental health research policies promoting gender or sex differences sensitivity	Currently, good policy process in Western societies often includes sharing and exploring options among "stakeholders" and interested parties, including, in the health area, researchers, institutional and financial partners, and to an increasing extent, patients and specific advocacy groups (organized around gender, around specific diseases, etc.). "Issues" useful to keep in focus during deliberations and decision-making are listed
Cassels, 1982	Cross sectional	Nepal	To compare two TB case finding methods	In a district with established tuberculosis services an active case-finding campaign revealed patients that had not presented for treatment of their own accord. These patients tended to be older than self-referred patients and there was a higher proportion of women

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
CEEWA, 2001	Report	Uganda	To describe the situation of women in Uganda in relation to political economy	Thanks to the increase in productivity ability, women became often fully responsible for the payment of children's education and health care
Dahlgren, 1991	Report	Kenya	To discuss policies for health financing	Development plans served as the medium through which the government announced its intentions as well as its decisions to implement reforms. A decision to implement a reform was normally accompanied by an implementation budget, whereas an announcement of an intention typically lacked such support. Some of the reforms were implemented speedily and firmly, whereas others suffered delays and reversals. Reforms were implemented with speed and firmness when research provided clear guidance on key policy issues or when political will and skill existed. Donor influence on the timing of reforms might have been excessive. Policy lessons from the process are indicated
Dahlgren, 2006	Review	EU	To present and discuss the European strategies to tackle social inequalities in health	Currently, many economic and commercial policies with a significant impact on health are not analysed from a health perspective. To remedy this, an additional policy recommendation is that all policies and programmes likely to have a significant positive or negative impact on health should always be assessed from a health perspective. Whenever possible, these health impact analyses should describe the effects on health by gender and socioeconomic group
Davidson, 2006	Review	N/A	To review specific gender determinants The authors consider the modifiability of these determinants and present recommendations about which of these determinants should be targeted for health promotion and policy creation activities	Author argues that gender is a multidetermined construct that encompasses many factors that may be modifiable through intervention, and consideration of all these factors should be vigorously pursued
Dewalt, 2004	Review	N/A	To explore the relationship between literacy and health outcomes	People with a low level of education have 1.5 to 3 times chance to be unhealthy
Doyal, 2000	Review	N/A	To explore the impact of gender divisions on health and the health care of both men and women	A three points agenda for change: policies to ensure universal access to reproductive health care, to reduce gender inequalities in access to resources, to reduce the constraints of rigidly defined gender roles

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Eagly, 2004	Cross sectional	USA	This research examined the proposition that differential role occupancy by women and men fosters gender gaps in socio-political attitudes	Analyses of the General Social Survey and a community sample showed that women, more than men, endorsed policies that are socially compassionate, traditionally moral, and supportive of equal rights for women and for gays and lesbians. To clarify the sources of these gaps, the research examined (a) similarities between gender gaps and gaps associated with other respondent attributes such as race and parenthood, (b) interactions between respondent sex and other attributes, (c) the temporal patterning of gender gaps, and (d) the mediation of attitudinal gender gaps by 3 ideological variables-commitment to equality, group-based dominance, and conservatism versus liberalism
Eichler, 1992	Review	N/A	To outline limitation and bias in medical research	Gender influences not only the different needs for health already mentioned above, the access to health care, the treatments and the related results, but also the contents and the processes of the health research. The vicious cycle due to systematic errors in research places less emphasis on gender in terms of health values
Evers, 2003	Review	Global approach	To offer a conceptual framework about global, macroeconomic, sector-wide influences on women's reproductive health and rights	For each issue, the author offers a set of core components for sector program assistance
EU Commission, 2000	Report	EU	The General Directorate of Research commissioned a report on gender aspects of research policy in the EU	A key recommendation in the report is to mainstream gender equality into the Sixth Framework Programme and into Member State programmes that fund science and technology. We make a set of proposals for specific activities within the Sixth Framework Programme. These include support for both female and male scientists in independent positions (Eurogroups), "one time grants" to provide innovative funding for women, resources for networks designed to increase communication between scientists, as well as other novel initiatives to benefit women in science
Faggiano, 2001	Survey	Italy	To describe social differential in smoking trends 1980-1994	Smoking prevalence increased among women, especially in the less educated groups

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Ford foundation, 2003	Report	Global approach	To outline the relevance of globalization for women's reproductive health and rights in the context of health sector reform	Those working in health sector reform to ensure respect for women's human dignity in the health system or for equity in access to reproductive and sexual health services might well be heartened by the development of human right standards. These standards can be used in a variety of ways: as a language/discourse that enables individuals and groups to claim the rights to which they are entitled on the basis of equality; as a means by which to foster states' compliance with human rights principles through national ombudspersons, national human rights commissions, and regional and international human rights reporting, complaint and inquiry procedures; and as an advocacy tool to hold governments accountable politically, socially and legally for any laws, policies or practices which do not comply with human rights principles
Gilson, 2003	Review	N/A	This paper considers what the debates on trust have to offer to health policy analysis by exploring the meaning, bases and outcomes of trust, and its relevance to health systems	It, first, presents a synthesis of theoretical perspectives on the notion of trust. Second, it argues both that trust underpins the co-operation within health systems that is necessary to health production, and that a trust-based health system can make an important contribution to building value in society. Finally, five conclusions are drawn for an approach to health policy analysis that takes trust seriously
Gijsbers van Wijk, 1995	Cohort	N/A	This study analyses data from a large-scale registration project in general practice (the Continuous Morbidity Registration), pertaining to the medical diagnoses of nearly 10,000 patients over a five year period. To establish the effects of sex, social class, marital and parental status on a number of distinct categories of health	Results illustrate that differentiation of the health variable into categories of health problems elucidates the relationship between sex, social variables and health
Grown, 2005	Editorial	Low income countries (LIC)	To discuss actions to improve women' s health	Pregnancy and childbirth are still a leading cause o death in LIC. Improving the situation is strictly linked to women's empowerment. Educating girls improves the use of health services, reduces gender inequalities and empowers women

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Hanson, 2002	Review	EU	To describe the differential burden of disease in women and to suggest priorities	Global Burden of Disease (GBD) methodologies were strongly advocated in the 1990s as tools for planning and priority-setting in the health sector The GBD methodology and the use of DALYs have been widely applied in many countries undertaking health sector reform to set priorities for resource allocation. However, these methodologies raise important questions from a gender equity perspective. Priority-setting methodologies in general can be useful for allocating resources, but their usefulness in priority-setting needs to be evaluated in the light of possible inherent biases (including gender biases) generated through various technical and conceptual limitations
Herz, 2004	Report	Developing countries	To summarize the extensive body of research on the state of girls' education in the developing world today; the impact of educating girls on families, economies, and nations; and the most promising approaches to increasing girls' enrollment and educational quality	The overall conclusions are straightforward: educating girls pays off *substantially*. While challenges still exist, existing research provides us guidance on how to make significant progress
Himmelweit, 2002	Review	UK	To analyze the gender impact of economic policy, based on the existence of an unpaid as well as a paid economy and on structural differences between men's and women's positions across the two economies	The paper suggests criteria for evaluating economic policy, so that its full gender impact and its effects on both paid and caring economies can be assessed
Johnson, 2000	Editorial	UK	To answer the question: how to assess gender impact in microfinance and microenterprises?	The author suggests and approaches for impact assessment based on: establish a gender baseline; consider the potential impacts of the project on gender relations. Establish the information and indicators required
Johansson, 2000	Case series	Vietnam	To explore perceptions, beliefs, knowledge and attitudes related to TB among Vietnamese men and women with and without TB	Three main contributing factors to delays in health seeking were identified. First of all, the stigmatising effects of TB. Secondly, respondents expressed a fear of high individual expenses for diagnosis and treatment leading to delay or total avoidance of public health facilities, particularly among men. Thirdly, health facilities, especially at commune level but also at TB facilities, did not correspond to people's expectations of appropriate public health services. Women were believed to be more sensitive to deficiencies in conditions of facilities and attitudes of staff than men

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Jonsson, 2006		Sweden	To review and analyse gender equity trends in health care	The National Board found that many of the gender disparities identified in the 1990s still exist, e.g. access to advanced evidence-based technologies such as coronary interventions. As previously, women account for around 60%, and men for 40%, of complaints, e.g. to the Patients' Advisory Committees. Many of the proposals of the National Committee have not been fully implemented by the national authorities or the county councils. Authors conclude that promoting gender equity in health care is an important but difficult task for health authorities. To make health services more gender sensitive a combination of strategies, including enforcement by guidelines and regulations, may be needed
Kutzin, 1993	Review	Developing countries	To examine obstacles to women's access to health care	Gender influences health care access through specific variables, not substantially modified by health policies.There is also evidence that families may be less willing to spend money on womens health, especially in south Asia
Li, 2004	Case series	China, The sample represents women who gave birth in 1991-1993	To test the general hypothesis that gender inequality (women's status and son preference) and the state's family planning policy have a significant influence on maternal and childcare utilization. This study examines the determinants of prenatal and obstetric care utilization within the context of recent social and economic changes in contemporary rural China	The extent to which the husband shares housework and childcare is positively associated with the likelihood that a woman receives prenatal examinations, stops heavy physical work before birth, and gives birth under aseptic conditions. Already having a son in the family reduces the chances that the mother will stop heavy physical work before birth for a subsequent pregnancy. Women with "outside the plan" pregnancies are less likely than those with "approved'' pregnancies to receive prenatal examinations, to stop strenuous work before birth, and to deliver under aseptic conditions
Liefooghe, 1997	Cross sectional	Kenya	To evaluate perceptions on TB	Many participants believe TB is hereditary. Prolonged self-treatment and consultation with the traditional health sector as well as the social stigma attached to the disease increase patient's delay, particularly in women. These social conditions necessitate culturally sensitive health education, taking into account local perceptions of TB
Lin, 2007	Cross sectional	N/A	Comparative evaluation of indicators for gender equity and health	Social class indices (education, income, work, holdings etc) should also be included

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Lopez, 1984	Report	Global approach	European Region's strategies to reduce sex differentials in mortality	Prospects for the future trend of sex differentials in developed societies depend largely on developments in 2 areas: the effective treatment of degenerative and chronic diseases, which dominate the cause-of-death structure in these societies; and prevention through health education and encouragement of changes in personal behaviour and life style. The challenge for women is to resist pressures to adopt a hazardous life style (e.g. smoking) that might offset the benefits of their improved social status
Mackintosh, 2004	Report	Africa	To present a gender analyses of health sector reform programmes	Many of the reforms may affect women differently than men because of women's greater need for health care due to their reproductive functions, their greater social, cultural and financial vulnerability, and their greater enrolment as health care providers both within the formal health care sector and the informal care system
Marmot, 2003	Review	N/A	A prominent feature of health in all industrialized countries is the social gradient in health and disease	To understand causality and generate policies to improve health, we must consider the relationship between social environment and health and especially the importance of early life experiences
Matroianni, 1994	Review	N/A	To outline limitation and bias in medical research	In clinical controlled trials aimed to evaluate drugs efficacy, the representation of men and women is unequal. Several criteria can partially exclude women from the research. In particular, hormone variations cannot be controlled for and consequently can pose as a potential confounder. In addition experimental treatments are concerned with adverse effects on fertility or on pregnancies occurring during the study follow-up
Neema, 2005	Report	N/A	To estimate the impact of health policies and health sector reform on the readiness of health systems to respond to women's health needs	However, reforms, strategies and interventions introduced in the last two decades, have achieved a limited success towards better gender equality in health
OECD, 2007	Survey	Worldwide	To answer the question: How have agencies tackled the challenges of promoting gender equality within the new aid modalities?	No agency seems, as yet, to have found a formula for success. It seems that the most important underlying issue is how to increase the operational commitment to gender equality and women's empowerment, within both donor agencies and partner country governments

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Onyango, 2001	Review	N/A	To review and synthesize published and unpublished literature examining the interaction between health sector reforms, gender and equity	Important areas for research to systematically uncover the gender impact of health care reforms would include: examining the differential access to insurance and type of coverage within insurance types; quantification of women's caregiving burden; examining the impact of health reform on human resources – especially in the nursing profession, where the workforce is predominantly female; outcomes research related to insurance coverage; examining the impact of privatisation; participatory research on decentralization – measuring the impact on resource allocation at the local level
Östlin, 2005	Report	N/A	To evaluate the effects of health care reforms on gender equity	Several reforms have a different impact in men than in women. This may be due to the different status of men and women as users and producers of health system. For instance there are many differences in the use of general and specialised medical assistance. Women use more frequently general assistance while men seek out specialised assistance
Ostlin, 2004	Review	N/A	On the need of investigations into the health of groups and the determinants of health inequities that lie outside the control of the individual	The way to move forward is to correct biases against poverty and gender in research content and processes and provide increased funding and better career incentives to support equity-linked research. Journals need to address equity concerns in their published content and in the publishing process. Efforts to broaden access to research information need to be well resourced, publicized and expanded
Park, 2002	Editorial	N/A	To describe gender bias in research	There is growing evidence of differential treatment of female scientists in terms of career opportunities, salary and as applicants for research funds and postdoctoral fellowships
Puentes-Markides, 1992	Review	Latin American, Caribbean countries	This paper is concerned with access to health care for women in developing countries, with specific reference to Latin American and Caribbean countries	Data indicate the need to move away from traditional solutions including framing gender-based health differences in status and access adequately, promoting and strengthening social participation of women in policy making
Swedish International Development Cooperation Agency (SIDA), 2006	Report	Svezia	To discuss strategies to introduce a gender mainstreaming in all policies	To make available gender disaggregated data in all current informative systems

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Standing, 1999	Review	Developing countries	To discuss the relationship between global feminization and flexible labor	Among the challenges are the need to reform systems of social protection. There is a corresponding need to promote alternative forms of collective institution to protect and enhance the status of vulnerable groups in labor markets, and a need to combine flexibility with steadily improving economic security. Women's growing involvement in labor force activities is to be welcomed as facilitating a trend toward gender equality, and should be strengthened. But the conditions in which women and men are typically in the labor market do not seem to have been improved. The trend is toward greater insecurity and inequality. Reversing that trend, which is associated with labor flexibility, is the most important labor market and social policy challenge of all
Tanner, 1998	Report	Areas with endemic malaria	To define strategies for preventing malaria	The level of endemicity determines which group of the population is at highest risk for infection, morbidity and mortality, and is strongly related to gender considerations. The paper develops a typology that combines the key factors of gender variables with epidemiological features. It consequently outlines an approach to community-based, effective malaria control tailored to a given endemic setting. Finally, we suggest that the proposed framework could be validated for its potential application to the control of other communicable diseases
Thorson, 2000	Cross sectional	Vietnam	To verify if sex inequalities can lead to poorer access to health care and delays to diagnosis of tuberculosis in women	The prevalence of cough was 1% (213) and 2% (279) in men and women, respectively. Women took more health-care actions than men, but chose less qualified providers and reported lower health expenditure per visit. Delay before seeking hospital treatment was longer for women (41 days) than men (19 days; $p = 0.04$), and more men (27; 36%) than women (14; 14%; $p = 0.0006$) reported giving a sputum sample at hospital. Sex-sensitive strategies for tuberculosis control are needed
Thorson, 2001	Review	Vietnam	To verify if gender has an impact on the tuberculosis and its control	Studies from Vietnam have shown that women with pulmonary TB are diagnosed on average 2 weeks later than men because of delays from the health care provider. In a study of persons with cough it was found that men were given sputum examinations more often than women. These and other findings are discussed in relation to the hypothesis that women with TB are under-notified

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Thorson, 2004	Case series	Vietnam	To explore doctors' views about and explanations for the longer doctor's delay	The doctors suggest that women are lost or delayed within the health care-seeking chain, mainly because of specific barriers associated with the female gender. Authors argue therefore that gender equity should be the guiding principle for the tuberculosis patient–doctor encounter, implying that interventions are needed in order to reduce delay to TB diagnosis especially for women
Thorson, 2007	Case series	Vietnam	The aim of the study was to analyse chest X-ray (CXR) findings among men and women with smear positive pulmonary tuberculosis (TB)	In this case women seem to access to services earlier than men
Townsend, 1992	Report	UK	To describe social inequalities in health	Inequalities are due to: different occupational exposition; different lifestyles; differential access to health care
UNDP, 1999	Report	Global approach	To describe the growing interdependence of people in today's globalizing world	Globalization is not new, but the present era has distinctive features. Shrinking space, shrinking time and disappearing borders are linking people's lives more deeply, more intensely, more immediately than ever before
UNDP, 2002	Report	Countries at high human development	To present the distribution of human development index and other indicators in various countries	The GDI (related to gender inequalities) measures the results achieved in the dimensions and variables of Human Development Index (HDI). The GEM (gender empowerment measure) points out whether women have the opportunity to take active part in economic and political life. Therefore, it measures gender inequality in key areas of decision-making process
Velez, 1997	Survey	Columbia	To examine the relationship between gender and access to care, for the specific case of Leishmaniasis	Men are more likely than women to comply with treatment provided through the health services. Health workers are not sufficiently trained to recognize and treat the symptoms, and women can not access the services so easily
Vlassoff, 1994	Report	Third World	This paper highlights several issues related to gender and health in the Third World on which information, especially of an empirical nature, is inadequate	This information include certain health conditions and diseases for which gender differences remain largely uncharted, gender inequalities in the development of health and contraceptive technology, the lack of gender-sensitivity in the provision of health services, and gender inequalities in health policies, focusing mainly on structural adjustment. Questions urgently requiring research are identified and suggestions are made for improving the gender sensitivity of health policies and interventions

(follows)

Tab. I. *(continues).*

Study	Study design	Population	Objectives	Main results
Waldron, 1985	Review	N/A	The 1st section of the paper summarizes results of studies that identify major causes of death which contribute to sex differences in total mortality and then identifies factors that contribute to sex differences for those causes of death. The 2nd section summarizes evidence concerning the causes of historical and cross-cultural variation in sex differences in mortality. General issues and hypotheses concerning the causes of sex differences in mortality are discussed in the 3rd section	The diversity and complexity demonstrated by current evidence leads to the rejection or qualification of previously proposed generalizations. In this regard, the relative importance of sex differences in incidence of disease vs. sex differences in prognosis or survival rates in determining sex differences in mortality, is addressed
Wenneras, 1997	Review	N/A	To outline limitation and bias in medical research	The unequal representation of women in the scientific community and in ethical and scientific committees, and the different treatment that females scientists receive from the scientific community are recognized as factors influencing gender bias in research

Tab. IIa. Rank and value for GDI and GEM in high human development countries (Source: UNDP, 2002).

Country	Gender-related development index (GDI) 2000		Gender empowerment measure (GEM) 2000	
	Rank	Value	Rank	Value
Norway	3	0.941	1	0.837
Sweden	4	0.940	3	0.824
Canada	5	0.938	7	0.777
Belgium	2	0.943	14	0.706
Australia	1	0.956	10	0.759
United States	6	0.937	11	0.757
Iceland	7	0.934	2	0.833
Netherland	9	0.933	6	0.781
Japan	11	0.927	32	0.527
Finland	8	0.933	5	0.803
Swizerland	14	0.923	13	0.718
France	12	0.926	–	–
United Kingdom	10	0.932	16	0.684
Denmark	13	0.925	4	0.821
Austria	15	0.921	12	0.745
Luxembourg	19	0.914	–	–
Germany	16	0.920	8	0.765
Ireland	17	0.917	17	0.675
New Zealand	18	0.915	9	0.765
Italy	20	0.907	31	0.539
Spain	21	0.906	15	0.702
Israel	22	0.891	22	0.596

(follows)

Tab. IIa. *(continues).*

Country	Gender-related development index (GDI) 2000		Gender empowerment measure (GEM) 2000	
	Rank	Value	Rank	Value
Hong Kong, China (SAR)	23	0.886	–	–
Greece	25	0.879	41	0.512
Singapore	24	0.880	23	0.592
Cyprus	26	0.879	34	0.525
Korea, Rep. of	29	0.875	61	0.378
Portugal	28	0.876	20	0.638
Slovenia	27	0.877	25	0.585
Malta	30	0.860		
Barbados	–	–	18	0.658
Brunei Darussalam	31	0.851	–	–
Czech Republic	32	0.846	28	0.560
Argentina	33	0.836	–	–
Hungary	35	0.833	44	0.500
Slovakia	34	0.833	29	0.545
Poland	36	0.831	24	0.590
Chile	39	0.824	49	0.474
Bahrain	40	0.822	–	–
Uruguay	37	0.828	36	0.519
Bahamas	38	0.825	19	0.652
Estonia	–	–	27	0.568
Costa Rica	41	0.814	26	0.579
Saint Kitts and Nevis	–	–	–	–
Kuwait	44	0.804	–	–

Tab. IIb. Rank and value for GDI and GEM in high human development countries (Source: UNDP, 2002).

Country	Gender-related development index (GDI) 2000		Gender empowerment measure (GEM) 2000	
	Rank	Value	Rank	Value
United Arab Emirates	47	0.798	–	–
Croatia	43	0.806	33	0.527
Lithuania	42	0.806	47	0.483
Trinidad and Tobago	45	0.798	21	0.611
Qatar	48	0.794	–	–
Latvia	46	0.798	30	0.539

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■ Correspondence: Prof. R. Siliquini, Department of Public Health, University of Torino, Via Santena 5 bis 10126 Torino, Italy – Tel. +39 011 6705812 – Fax +39 011 6705889 – E-mail: roberta.siliquini@unito.it