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Gender in occupational safety and health: the systemic vision of social sciences

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Summary. The author describes how a gender approach to health and safety at work allows to address specific issues in order to promote health in a uniform, global and universal way for women and men, and how it could be integrated in current models by evaluating the implications of rules, policies or procedures for both genders. It is urgent to face an extraordinary challenge in gender medicine, including the "occupational gender medicine" development, the bio-psycho-social, technical, methodological and scientific gender mainstreaming of a vast and complex argument as is health and safety at work. The macro, meso and micro-dimensions of the complex system relating to health and work are discussed on the basis of available studies and systematic reviews. Given the breadth of this subject matter, a preliminary overview is provided that will be developed by more detailed analysis in the future, focusing on the interrelationships between biological and social variables (i.e., sex and gender).

Key words: gender approach, health and safety at work, gender analysis, complex system.

Introduction

A gender-specific approach to occupational safety and health (OSH) makes it possible to deal with specific issues in order to promote health in a uniform, global and universal manner for men and women and is achieved through the incorporation of an outlook that is the process of assessment of the implications of regulations, policy or programmes for both genders. The European Union[1] and European[2] and international agencies[3] stress the importance of an inclusive approach that pays attention to sex and gender differences and they oblige the individual countries to adopt regulations and practices such as to implement the protection uniformity obligation. It would therefore appear clear that, in order to tackle OSH from a gender-specific standpoint, it is necessary to take into consideration the macro-, meso- and microdimensions of the analysis of the complex system regarding the relationship between health and work.

A gender-sensitive approach to OSH recognises and makes visible the differences, of both a biological and a social nature, between male and female workers, as regards the dangers they are exposed to, thereby highlighting any vulnerability of certain groups within the working population.

These peculiar conditions are generated by the intersection of determinants and variables such as sex and gender, age, socioeconomic status, occupational condition, etc., and interact with the risk factors that subjects are exposed to in their working life, taking into account the multifactorial aspect of the causes of occupational illness or accidents.

Besides, many standards concerning occupational health and safety and hazardous substance exposure limits, for example, are still based on studies performed on the male population and primarily consist of male-dominated employment sectors. In the same way, the categorisation of occupational accidents and illnesses for damage compensation purposes primarily concerns the work-related illnesses and accidents that are most common amongst the male population, the result of a culture that uses maleness as the neutral default, which therefore penalises both women and real men. In connection with this, it is interesting to note that, thanks to the new fields of research opened up by gender-specific medicine, we are currently witnessing an increase not only in studies on female specificities, but also in those on male specificities, in a bio-psycho-social dimension.

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The advent of gender-specific occupational medicine

The prevention and removal of the occupational risks managed according to measurable criteria based on indicators regarding "gender appropriateness, effectiveness and equality" – see EAGE Index[4] – must therefore be based on research with a solid gender-specific approach. It is, by nature, intersectional, in all the various disciplinary areas, including occupational medicine, epidemiology, ergonomics, statistics, sociology, engineering, etc.

Besides, it would appear obvious that it is not easy, for researchers who do not have a specialist training, to make a distinction between the intersectional approach and the analysis of covariance approach, which is often adopted by the majority of conventional biomedical health researchers[5,6]. We are therefore faced with a challenge of extraordinary scope in the gender-specific medicine field: the development of gender-specific occupational medicine. This does not involve the advent of a new discipline, rather the gender mainstreaming, in bio-psycho-social, technical, methodological and scientific terms, of a vast and complex subject, such as that of occupational safety and health. We therefore need to think in a systemic and transdisciplinary manner. Moreover, the WHO's definition of health is also questioned[7] by the concept that health is more a capacity for "adaptation and self-management" than a condition of "complete social, mental and physical wellness". According to this proposal, we need to create a dynamic, constantly-improving state of health through individual and collective health-promotion initiatives[6].

Indeed, according to a gender-specific approach, it is necessary to progress from an idea of health as a "status" to an idea of health as a "dynamic process", which implies preferable and identifiable standards both as regards the expectations of the working population and as regards the realistic, continuously-improvable expectations. The health process therefore regards physical, mental and social wellness. This social dimension implies both relations between subjects at work and the relations between occupational and non-occupational life, which is where the gender dimension plays a crucial role. In connection with this, it is important to stress that the concept of health has changed over time, as what is meant by health does not coincide with a natural state, rather a condition indicated by a social construction, in the same way that gender is a social, dynamic and relational construct.

This premise applied to occupational safety and health therefore implies that the risk prevention programme must be incorporated into the planning of work, the design and fitting of workplaces, instruments, jobs and operating procedures: the whole work process. The prevention programme must guarantee that the orders identified assure a true improvement in the level of worker protection, which is also achieved through policies and schemes with an extra-corporate scope and strong gender implications, starting from the issues of occupational segregation, discrimination and pay gap.

Occupational safety and health as a complex system

The gender impact of family models and public policy

In the health sociology sector, it is known that the indicators of poor job quality and poor wellness and health are closely related. Gender-specific health differences are much less marked in countries with a welfare system that promotes policies that facilitate the full-time employment of women and in which the female participation in the workforce, especially of working mothers, is encouraged through the provision of high-quality care services (e.g. Sweden, Denmark and Finland). Conversely, a greater difference between the health of women and men (to the disadvantage of women) is found in countries in which society is based on a traditional family model and on a welfare model that leaves the family to carry most of the burden with regard to care and healthcare.

In those welfare systems with solid policies that favour full female occupation and, therefore, reconciliation, they mitigate the effects of potential poor quality employment in men and women who, therefore, show that they are less vulnerable in terms of health.

A number of hypotheses are explored in a study conducted jointly by the Department of Sociology of the University of Vrije (Brussels) and Pompeu Fabra University of Barcelona[8]. The study explores the relationships between variables related to work quality (both the nature of work tasks and working conditions) with the mental health of women and men. The links between the job quality and psychological wellness are investigated using a set of multidimensional indicators for job quality (type of contract, salary, irregular and/or anti-social working hours, occupational status, training; participation; representation). They are all then correlated with the different welfare systems in 21 European countries.

Women have higher levels of education and are more likely to be single parents; they claim (in a smaller percentage) that they receive satisfactory salaries and they have higher part-time employment rates than men. The study shows that an inadequate family income and irregular working hours are the strongest predictors of poor mental wellness.

For both men and women, at least one-dimension characterising poor job quality is significantly related with poor psychological and mental wellness.

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However, gender differences between stratified groups show a higher vulnerability of health in women with poor-quality jobs.

Regardless of the type of welfare, men have better mental health than women; however, the policy models for a rebalance between family life and work are seen to be more worker-friendly models for both.

Employment market and damage to health

Over time, increasingly flexible work markets have led to the formation of non-linear career pathways, which increases precariousness. Career fragmentation correlates positively with the risk of accidents: precarious workers are at a disadvantage and have a significantly higher likelihood of being involved in both minor and severe accidents[9].

In the meantime, data from the USA show that, historically, male workers constituted the higher percentage of fatal occupational accidents. One common explanation is that men are over-represented in the jobs that are physically more dangerous. Another potential explanation is that the prescribed gender roles and regulations favour higher fatal accident rates amongst male workers than amongst female ones. The results of the study indicate that over 25% of all occupational deaths in 2012 occurred outside what one would expect for equivalent mortality relations for men and women working in the same profession. In addition, the gender characteristics of work and workers are significantly predictive of the variance of the greater relative risk of occupational death for men in all occupations (these characteristics, combined with gender representation, would explain the 10% total variance in the greater relative risk of male mortality). The results suggest that men may have an increased risk of fatal occupational accidents than women in the same occupations[10].

The WorkSafe Victoria study (Australia) analysed the data regarding the compensation awarded to male and female workers (254,704 cases between 2004-2011). The rates are calculated by combining the compensation data with employment data throughout the state.

The compensation claim rate for mental disorders was 1.9 times higher amongst women, whereas the physical injury rates were 1.4 times higher amongst men. The data adjusted by professional group showed that the difference in compensation rates for musculoskeletal illnesses were higher amongst women than amongst men after adaptation for occupational exposure.

Men had higher physical injury claim rates than women, which was, in part, attributable to occupational factors. Women had higher mental health-related claim rates than men, which was not fully explained in relation to work alone[11].

The issue of male specificity has been dedicated little research, whereas the workplace is a key environment in which gender-related matters and organisational structures may influence professional health and safety practices. The fact that work cultures are dominated by a male outlook in high-risk occupations may be particularly problematic, as it exposes men to significant risks for fatal injuries and accidents. One literature review provided a critical examination of the intersection between maleness and male occupational health and safety and identified the objectives requiring further investigation: identification of the topics able to improve the understanding of maleness in the occupational safety and health sector; identification of the shortfalls of research and practice concerning male occupational safety and health; consideration of how maleness may intersect with other variables (for example, historical context, age, class, ethnic origin, geographic location)[12].

Mental health and the socioeconomic depression

Certain studies have explored the changes that have taken place in terms of exposure to psychosocial risks and work-related stress, associated with the current economic depression. The first results show a significant worsening in health outcomes compared to the pre-depression period, with a consequent increase in absence for illness, suicides and mental health issues [13-15].

When the researchers analyse the relationship between work organisation and the health of female and male workers, they usually focus on the work environment (i.e. the characteristics of work).

Less attention (none, in the current methods used to assess work-related stress) is dedicated to external factors: employment market and the national and international economic situation; this has non-negligible implications, given the evidence on the close correlation between health outcomes associated with work-related stress and the broader macroeconomic context factors.

The regional, national or international situation may influence people directly (for example in terms of individual reactions to changed financial prospects) and indirectly (for example, through the changes in organisational policies introduced in response to the financial situation, for example, salary freezing and redundancies).

The investigations performed in recession periods in certain countries show that these factors directly affect the conditions of employment, wellness and mental health.

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One study conducted in Andalusia[16], the most populated region of Spain and one with a high unemployment rate, showed that suicide rates (identified as an indicator of health) rose in certain European countries during the current situation of financial hardship and austerity.

A steep increase in suicide rates was recorded in Andalusia after the beginning of the depression amongst both men and women. Adults aged between 35 and 54 years were the most affected in both sexes. Analysis by age showed that the 35-44 year-old population class was the most affected.

These data were further confirmed by a recent study that revealed an increase in mental health problems amongst Spanish men aged 35-54, especially when they were heads-of-family, that could be attributed to unemployment during the early years of the depression[14].

Attempted suicide is associated with unemployment more frequently in men than women and men represented almost half of all cases during the first five years of the depression.

One potential explanation for this result is that, in Andalusia, for example, the gender role identifies the status deriving from work as an essential element of masculinity. Men are under greater pressure due to their gender role and, therefore, unemployment and the uncertainty regarding future employment could have a greater impact on their health due to the traditional roles existing within the family.

Women were also affected by this phenomenon during the recession; however, this association may not be specifically attributed to unemployment and further, more in-depth, research is required.

According to the researchers, one unexpected discovery was the relationship observed between suicide in young men (20-24 years) and worldwide unemployment rates. The difficulties in entering the employment market encountered by young adults may play an important role in this association. The unemployment rate in men under 24 years of age was higher than 50% during the study period.

Work conditions and perception of health: few gender-specific studies

Gender differences (socially determined) in employment, in the type of job and conditions of employment, in the allocation of tasks and in the work methods involving exposure to health risks are always more extensively recorded.

One significant systematic review[17] conducted in Spain was based on studies conducted over an eleven-year period to explore the relationship between conditions of employment and the health of women and men, by applying selection conditions such as to make it possible to consider gender-specific studies only. These selection conditions made it possible to analyse just 30 studies, of which 19 conducted in Europe, excluding all others.

The study shows that, compared to men, women have a higher percentage of short-term contracts and they suffer this precariousness subjectively; they have worse contractual conditions and give great importance to the psychosocial aspect of work. They perceive a worse physical and mental state of health. Men, on the other hand, are exposed to longer working hours, more demanding positions in physical and noise terms and they consider the commitment-compensation dimension to be unbalanced. They have hierarchically higher positions than women. Both groups are exposed to challenging demands, however a higher number of women experience poor control over their work and a higher percentage of men complain of poor social support.

Discrimination and harassment as risk factors

Certain well-known inequalities between the sexes such as discrimination, sexual harassment and gender pay gap (to the disadvantage of women) for similar jobs, despite being identified as important determinants of health in literature, were not taken into account in the studies analysed.

The fact that studies have been identified that explore these issues from a woman's perspective alone, mean that these studies were excluded from gender-specific studies review.

The evidence suggests, to those who conduct occupational medicine research, that discrimination, harassment and bullying should be included in studies on the effect of conditions of employment on health.

It is estimated that one in every two women worldwide are sexually harassed during their working lives, making sexual harassment the most common form of violence against women and, at the same time, one of the most underestimated health risks in the assessment of occupational safety and health.

Sexual harassment (or sex-based harassment) consists of three categories of behaviour: gender harassment, undesired sexual attention and fully-blown sexual coercion. One important review of the consequences of sex-based harassment in the workplace confirms that this phenomenon constitutes a serious problem for women around the world, as it threatens their mental health and financial survival[18].

This research was conducted in the United States, by the Department of Psychology of the University of Michigan; however, studies performed in other coun-

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tries have produced similar results. Most of the women who experience harassment in the workplace say that they suffer from symptoms of depression, anxiety and post-traumatic stress; they make greater use of alcohol and drugs and are more likely to suffer from eating disorders.

On a cognitive and emotive level, these disorders often correlate with a negative state of mind, guilt, poor self-esteem, emotional breakdown, anger, disgust, envy, fear and a general feeling of lesser satisfaction with life. These outcomes can also be identified in the victims of more indirect forms of harassment (for example, strategic sexual discrimination) and amongst those who do not use the definition 'sexual discrimination' to describe their experiences.

The relationship between sex-based harassment and mental health are still significant, even when verifying other risk factors with potentially confounding effects: other factors of stress in life, other aspects of work, personality traits and sociodemographic factors.

Although very few studies have been conducted and few data are available regarding the sexual harassment of men, a spokesman of the United States Equal Employment Opportunity Commission[19] claims that the number of cases involving men has doubled over the past 15 years. According to those who have studied this issue, men are less likely to talk about cases of harassment for fear of being made fun of by their co-workers.

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