

## EDITORIAL

### Job satisfaction and health

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A country providing a public healthcare system does not necessarily mean equal opportunities in healthcare.

Social inequality is also reflected in the way healthcare is managed and this does not depend only by the provided services. In fact in all European countries, including Italy, healthcare services have become less accessible without having to pay privately. Inequality is also and especially expressed by the individual wealth, by the level of satisfaction at work and in life, education, culture as well as social cohesion and solidarity.

In the last 25 years the inequality in income has grown dramatically in all Western countries and in Japan. This inequality is measured with a statistic coefficient, the Gini index, which is a number between 0 and 1. A coefficient closer to the zero means a more equal wealth distribution.

With the '68 social campaigns, Italy became one of the capitalistic countries with less inequalities for two decades. At the beginning of the Eighties, the Gini index reached 0,29. Then, since the end of the Eighties and for the following 25 years, it touched 0,34 showing a clear increase of income inequality. This was also due to the loss of real salary as the Italian workers lost their job or were made redundant, put on temporary contracts or forced to accept lower salaries (ironically these contracts are called “solidarity contracts”).

And yet income is not everything. Social epidemiology studies agree on a key concept: work is a primary source for health/disease regulation. The level of satisfaction and control of working conditions is the determining element that tips the balance either in favour of health or disease. Satisfaction and sense of control are strictly connected. Obviously the highest feeling of loss of control is represented by situations such as being unemployed, on a temporary work contract or under the power of the employers. A number of studies have shown that unemployment and a sense of little control on one's own work are associated to the most common mental disorders such as anxiety and depression.

Not only psyche and brain are affected. Also heart and the metabolic systems are closely impacted by feeling little satisfaction at the workplace and the sense of scarce control on one's own employment. Research models used in this field such as the “Effort-Reward-Imbalance” and “Demand-Control Model” come substantially to the same conclusion namely that excessive work demands and low level of satisfaction and control lead to a work related chronic stress condition which affects the worker's heart functions with an increase of atrial fibrillation as documented by a thorough Swedish study<sup>1</sup>. Work related stress

also aggravates the traditional heart risk factors such as the lipid metabolism and it seems to affect any kind of workers category and nationality.

A study lead by cardiologists from the University of Peking shows that the higher is the imbalance between Effort and Reward at the disadvantage of Reward, the higher were the alterations in cholesterol, triglycerides and fibrinogen<sup>2</sup>.

Two Italian studies were conducted one on a group of radiologists and radiotherapists<sup>3</sup> and the other on policemen working at the VI Mobile Police Department of Genoa Police Headquarters<sup>4</sup>. Both studies show a direct correlation between higher stress levels, increase of triglyceride and decrease of HDL cholesterol (the protective cholesterol).

It is puzzling how employers of Italian companies state that in our country there is no work related stress. This paradox is made possible thanks to the complicity of the Government and occupational health doctors.

1. Fransson EI et al (2015) BioMed Research International, 371905. <http://doi.org/10.1155/2015/371905>
2. Xu W et al (2011) J Occup Health 53(5):334-42
3. Magnavita N, Fileni A. (2014) Radiol Med. 119(2):142–8.
4. Garbarino S., & Magnavita N. (2015) PLoS ONE, 10(12), e0144318.