

Editorial

Biology of submission and social disadvantage.

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In Italy, Europe and worldwide the current main concern for the population is the economic crisis which results in mass unemployment, uneasy work conditions, frozen expectations for improving one's own financial situation, decrease of families' income, decline in the quality provided by public services from school to health institutions. Until now people did not know whom to blame as this catastrophe seemed to be caused by the invisible hand of the market. Recently something new happened in Italy. This time it was not the anonymous market but the CEO of the biggest and historical industrial group of the country imposing to the workers of a plant near Naples to accept unilateral contract clauses.

It is the master hitting his fist on the table, wiping off an entire era and bringing the local workers back to the condition of "labour force", one of the factors in production just as the machines in the sheds. All commentators agree in observing that this event does not concern just a single plant but it is a sign of what is going to happen in the future. What will then be the subsequences of this situation on the health of the workers, their families, unemployed young people or with insecure jobs? What will be the subsequences on the entire society?

Work is one of the fundamental determiner of the identity of each of us. We are social animals forming our own identity starting from the position we have in society, the role we hold, the consideration others have for us, and, last but not least, by our ability to purchase goods: a milestone and emblem of this consumerist society.

If work disappears our identity is at stake. These last months saw desperate battles of groups of precarious or laid off workers who installed themselves on roofs or on an island to protest against redundancy. It is not a chance that one of the most recurring metaphors was "we are invisible, we do not exist". No work, no identity. Because of this reason, as Pomigliano plant teaches, large sectors of the population lower their head: obedience is again an undisputed social value. Under authoritarian conditions one obeys to a master, to a leader. Several psychological studies have shown (even with experimental evidence) that in an authoritarian climate, most of the people think it is normal to comply with the orders even

when these are clearly clashing with one's own principles. This situation causes what the social psychologists call "cognitive dissonance" which occurs when a person perceives a conflict between his/her own beliefs and his/her own behaviour. For many people this represents the phase before depression: the clinical manifestation of one's own inability to solve the conflict. Beside depression, there will also be a small percentage of people (36% of Pomigliano workers voted no) who will also develop rumination, anger and hostility. According to the scientific data available to us¹, we can definitely predict that both the submitted and the hostile groups will show a significant increase in psychiatric pathologies and internal medicine cases. The brain is the organism's greatest adaptor. During this kind of conflicting conditions the brain is subjected to a strong chronic stress to which it can not respond adequately. This alters the fundamental cerebral circuits especially the prefrontal cortex-hypothalamus-hippocampus-amygdala group causing a sequence of alterations in several systems: from the basic inflammatory ones (which become dysregulated and hyperactive), to the metabolic, immunitary and nervous ones. The circle closes: the dysregulation started from the brain, comes back to the brain altering it in a permanent way².

In this issue we focus on the link between depression and diabetes. We will deepen this topic throughout the whole next year in preparation for the next SIPNEI International Congress scheduled for October 2011 and devoted to "Stress and life". We will extensively illustrate it on the following issue.

¹ Cohen S et al., Psychological stress and disease, *JAMA* 2007; 298: 1685-1687

² McEwen B., Gianaros P.J., Central role of the brain in stress and adaptation: link to socioeconomic status, health, and disease, *Annals of the New York Academy of Sciences* 2010; 1186: 190-222

Medial view

Prefrontal cortex
Decision-making processes,
executive functions
Control on behaviour and
stress

Amygdala
Emotions, fear, anxiety,
aggressiveness, stress

Hypothalamus
Activating the stress axis,
hormones, hunger and satiety,
body temperature

Hippocampus
Memory, regulation
of stress response

