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2) Il Sole 24 Ore – Sanità 24

Cerebrovascular mortality, the ignored (and silent) female killer: minister Lorenzin, what can we do?

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Cerebrovascular mortality is becoming increasingly a female problem. The social imbalance has reached a critical mass, which, added to genetic and environmental factors, risks undermining the social cohesion and the growth of our country. Can this female silent killer go unnoticed by contemporary science and consciences as well as by the new power of the State?

Cerebrovascular risk is the third cause of death for women. In 2013 the number of deaths totalled 58,373, of which 60.36 % were female, having a level of mortality 20% higher on average than males (Istat and Dasoe data). In fact, we had already mentioned the issue in the *Sole 24 Ore – Sanità*, when discussing the *Ora cuore di donna* project (March 8th-14th, 2016). On the back of this preliminary analysis conducted on Sicilian data, we extended the study (2013) and observed, in the various regional and provincial capitals, the distribution of cardiovascular disease, reported in the Istat charts as the first cause of death and related to sex and area.

Messina, nightmare for women; Matera, virtuous city

Whilst coronary disease shows on average a predominance in males by just a few percent, with an uneven distribution in the cities, the observation on cerebrovascular mortality data on average

reveals an excess prevalence of 20% in females throughout the country. In Sicily, Messina is the leader city for women's cerebrovascular mortality (63.81%), showing a 27.62% excess compared to men: a fact that puts this city in a higher place than many bigger cities spread throughout the country. At the lowest limit we find the exception of Matera (in Basilicata, Southern Italy), most likely the only Italian case where data are reverse: here men show a 4.5% predominance of mortality due to cerebrovascular causes.

Women appear to be at risk in North-Western Italy, and we highlighted the greatest female preponderance over males on the northern borders (70% in Aosta Valley, 70% in Sondrio, 68% in Gorizia). Every maximum has its correspondent opposite, so from the observation of these series of numbers a fact emerges: pockets (enclaves) under 10% of female prevalence for cerebrovascular mortality exist, and they are mainly in the Southern regions (like Matera), in Sicily, in Sardinia, and – some sporadic cases – in the Marches.

Numerous scientific observations of the Italian Higher Institute of Health had already detected, in recent years, a change in the risk profile of females, who are about to supersede males also for risk of cardiac death (in 2013, there were 71,572 deaths for ischemic heart disease: 48.73% women and 51.27% men). We can no longer stand by with this dramatic data: we urgently need a review of risk maps (Italian and European). These Health interventions have so far favoured males, leaving females to their fate without prevention or suitable diagnostic-therapeutic procedure which includes structured and personalized waiting lists. In fact, it is no longer justifiable to take those with 20-30% lower mortality rates from the same waiting lists. Because the diseases different, the intervention strategy to reduce the risk

should be different. Women after the menopause are more likely to smoke and become less active; they are more likely to suffer high blood pressure, obesity and diabetes. Furthermore, they are still paying the price of less education, as well as social asymmetry of poverty (which affects the lower classes in Sicily with a further 15% risk). Women born in Southern Italy have less of the famous increased life expectancy compared to men – which rather women born in Northern Italy enjoy.

In the "Black Report" of 1980 the British researchers had already studied how inequalities in health and life prospects were tied to income, worsening the poor social cohesion of developed societies in periods of crisis. Recently in the USA the scientific journal JAMA spoke of a widening gap in life expectancy between the richest and poorest (2001-2014 period) of up to 15 years for men and 10 years for women. One possible intervention could be the study of the enclaves that show a lower risk (in these locations, in addition to genetics, exposure to the environment is equal in men and women).

We therefore propose to the Minister of Health, Beatrice Lorenzin, to promote a study on these small groups, in search of a mathematical model that could speak to the nation of a different risk for women and how to cope with it – without the need to extend the analysis throughout the national territory, in order to contain spending. In fact the National Health Service not only need Galilean optics to scan the horizons, but it may well provide groups of young researchers with magnifying glasses to examine the enormous streams of rich data becoming a dialogue and social training centre, and enabling young people to learn from the example of the leaders in the field. All this will only happen by combining the knowledge base, by making hearts get

along well together, making them like a physician's heart, which cares for the patient in their entirety of illness and humanity, and like a careful mother is also able to save as much as possible for the future. From the detailed study of the territory, also prioritizing healthcare spending follows.

The State, also in this case, must take responsibility of new programs aimed at expanding knowledge base, forming multidisciplinary researchers, who are the foundation of the science evolution. We request a new intervention strategy from the government, involving the creation of diagnostic and formative task forces, often more agile and flexible than the mega-structures present throughout the national territory. We ask minister Lorenzin to promote the propagation of knowledge from High Schools to all schools, in order to stop the waste of human capital, which is the only wealth and salvation of the nation, of healthcare, and apparently also of women.

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