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Urban environment, health and gender

A devastating earthquake has recently struck at the heart of Italy and for the umpteenth time it has pointed the spotlight on the issue of urban areas and the guarantees they offer their inhabitants in terms of safety and more. The correlation between urban planning and the health of population is now corroborated by a huge body of scientific studies. And it seems that women are those who pay the highest price in terms of health and well-being in present-day urban aggregates. In so-called "rationalist" cities—designed around the concept of functional specialization based on residential and production areas, and built as social housing complexes with a high concentration of spaces and inhabitants, and suburban complexes with low building and population density—the real danger is no longer infection and the spread of bacteria and viruses, but rather social hardship, linked either to a situation of economic disadvantage or to the loss of urban functions by a local territory that no longer recognizes its true identity: neither countryside, nor city. These conditions are forcing the inhabitants to depend on motor vehicles to commute and this has consequences on public health that are linked in part to unhealthy behaviours and lifestyles that find the perfect breeding ground when these areas are no longer able to perform functions typical of cities.

One epidemiological indicator of these aspects of contemporary city life is obesity. It is a disease resulting from a combination of poor dietary habits and lack of exercise that finds extremely favourable conditions for its diffusion in environments lacking green spaces and shops. Fewer opportunities to move about and greater dependence on cars mean a greater risk of becoming obese and paving the way for the emergence of other diseases, such as diabetes and cardiovascular diseases.

Expanding pedestrian areas in cities improves public health, as highlighted by a study published in 2014 in the *Journal of Transport and Health*[1].

Urban life and health are therefore two aspects that go hand in hand and women are the most exposed to the effects of the fragmentation of the urban territory, of scarce pedestrian areas, and of the concentration of socio-economic disadvantage in peripheral and suburban areas around cities.

Cities, with their businesses, schools, banks, services, gyms and sports facilities, cultural venues and public green spaces, represent a protective factor for the population and specifically for women.

In 2012 a study published in *Health & Place*[2] showed that, in a sample of American women aged between 50 and 79 years, a lower probability of developing coronary heart disease was related to living in urban areas and that even moving to more densely inhabited and built-up areas reduced the risk of developing disease by 11%. In 2015 another research study published in the same journal[3] showed how the presence of public parks was associated with a lower body mass index in a sample of women living in urban areas in Australia and the United States.

Already back in 1963, Betty Friedan had placed the emphasis in her book *The Feminine Mystique*[4] on the link between urban environment and the health of women, pointing out the psychiatric manifestations in women living in suburban neighbourhoods around major US cities. Perhaps due to their different social status, women are those most exposed to the effects of modern urbanization and since several scientific studies have proven that the urban environment is "obesogenic"[5] by its own very nature and that women are the most affected by this disease, it is a priority for cities to be redesigned from a gender perspective, at least to avoid that a significant part of the population be exposed to the risk of developing the new pathologies that characterise contemporary cities.

And now let us come to the articles that our readers will find in this issue of the *Italian Journal of Gender-specific Medicine*.

Cinzia Niolu, Emanuela Bianciardi and Alberto Siracusano[6], Tor Vergata University in Rome, discuss gender differences in obese subjects in terms of sexual dysfunctions. The correlation between obesity and sexual disorders reveals a disturbing phenomenon. The review examines the most frequent sexual abnormalities in obese men and women and lists the possible etiopathogenic mechanisms. Sexual dysfunctions affect the quality of life: it is therefore necessary to know them taking into account the differences between the two sexes, diagnosing and treating them.

Graziella Caselli, Sapienza University of Rome, examines gender differences in terms of survival in "The gender gap in survival: a new perspective"[7]. Lifestyles that are detrimental to health have penalised men for a long time in terms of mean survival compared with women.

The turning point came in the generations born

after the 1930s, when men started to realise that they had to copy the behaviours of women belonging to their same age group if they wanted to live longer.

Little is known about the difference between males and females regarding cardiotoxicity induced by doxorubicin, a powerful anthracycline. Renée Ventura-Clapier (Université Paris-Sud), in "Sex differences in anthracycline cardiotoxicity"[8], explains that these drugs are among the most effective in chemotherapy, though their use is penalised precisely by the risk of cardiotoxicity. She provides an overview of the current state of knowledge on gender differences in humans and in some animal models and calls for greater collaboration between oncologists and cardiologists as part of gender-based medicine.

In "A review of gender differences in hip fracture anatomy, morbidity, mortality and function"[9], Giovanni Vicenti and his team at Bari General Hospital provide an overview of the literature on gender differences in femur fractures which, as is well known, are a significant cause of morbidity and mortality in elderly people of both sexes. However, it is also known that while the incidence of hip fractures in women over 75 is more than double compared to that of men, mortality at 1 and 2 years post fracture is higher in men.

Valeria Manicardi and her team[10] at Gruppo Donna AMD discuss "Gender differences in type 2 diabetes." Diabetic women are at greater risk of major cardiovascular events and more obese, have a poorer control of their diabetes, as well as a worse lipid profile and a greater frequency of reduced glomerular filtrate. Many studies also show that diabetic women are under-treated with drugs to control risk factors, although Italian data do not seem to confirm this trend. According to Manicardi, certain biological factors not yet studied and that may be the cause of these differences need to be investigated.

The journal ends with an interview with Roberta Mori[11] of the Emilia Romagna Region who tells what their priorities are in terms of gender and how these will be addressed by public health policies in her region.

Noteworthy is the article by Giovanella Baggio who has written a review of the book by Marek Glezerman "Gender Medicine" (Overlook Duckworth New York - London 2016)[12], enriched by a preface by the Israeli writer and journalist Amos Oz.

References

1. Marshall WE et al. Community design, street networks, and public health. J Transp Health 2014; 1 (4): 328-46.
2. Griffin BA et al. The relationship between urban sprawl and coronary heart disease in women. Health Place 2013; 20: 51-61. doi: 10.1016/j.healthplace.2012.11.003. Epub 2012 Dec 7.
3. Veicth J. et al. Park availability and physical activity, TV time, and overweight and obesity among women: Findings from Australia and the United States. Health Place 2016; 38:96-102. doi: 10.1016/j.healthplace.2015.12.004. Epub 2016 Feb 1.
4. Friedan B. The Feminine Mystique, Trad. it. La mistica della femminilità, Roma, Castelvecchi, 2012 .
5. Tseng M et al. Is neighborhood obesogenity associated with body mass index in women? Application of an obesogenity index in socioeconomically disadvantaged neighborhood. Health Place 2014; 30:20-7. doi: 10.1016/j.healthplace.2014.07.012. Epub 2014 Aug 23.
6. Niolu C, Bianciardi E, Siracusano A. Gender differences in sexual dysfunctions among individuals with obesity. Ital J Gender-Specific Med 2016; 2(2): 69-74.
7. Caselli G. The gender gap in survival: a new perspective. Ital J Gender-Specific Med 2016; 2(2): 75-82.
8. Ventura-Clapier R, Moulin M, Piquereau J, Zurlo G, Garnier A. Sex differences in anthracycline cardiotoxicity. Ital J Gender-Specific Med 2016; 2(2): 47-54.
9. Solarino G, Vicenti G, Picca G, Rifino F, Carrozzo M, Moretti B. A review of gender differences in hip fractures anatomy, morbidity, mortality and function. Ital J Gender-Specific Med 2016; 2(2): 55-9.
10. Manicardi V et al. on behalf of Gruppo Donna AMD. Gender differences in type 2 diabetes (Italy). Ital J Gender-Specific Med 2016; 2(2): 60-8.
11. Le politiche in materia di medicina di genere della Regione Emilia-Romagna. A colloquio con Roberta Mori. Ital J Gender-Specific Med 2016; 2(2): 85-7.
12. Baggio G. Gender medicine, a necessary revolution. Book review of "Gender Medicine" by Marek Glezerman. Ital J Gender-Specific Med 2016; 2(2): 83-4.

For further reading, see also the post by Michela Barzi, on the blog "inGenere", "Ammalarsi di città", 03/05/2016 and the essay "Che genere di città" edited by inGenere.it (http://www.ingenere.it/dossier/che-genere-di-citta).

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