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Respiratory Diseases in Women

Edited by
S. Buist, C.E. Mapp

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Preface

Present day insights into the relationship between gender and health emphasise the necessity of taking sex and gender differences into consideration. Sex refers to biological characteristics such as chromosomes, physiology and anatomy that distinguish females and males. Gender refers to the array of socially constructed roles and relationships, personality traits, attitudes, behaviours and values that society ascribes to the two sexes on a differential basis. Sex is considered a quality and gender a process with effects on the personal, societal and symbolic level. The Philosophical introduction by M. Leo in this issue of the Monograph further elaborates this gender concept.

In health-related research both sex differences and differences resulting from gender are implied. Sex can determine differential propensities for certain health conditions or diseases, different risk factors or treatment requirements. These sex differences have, for a long time, only been recognised in the domain of reproductive health but clearly transcend reproductive systems. Sex differences must therefore be taken into account in research protocols, methodologies and analysis of results especially in the field of genomics.

Gender can determine different exposures to certain risks, different treatment seeking patterns or differential impacts of social and economic determinants. However, gender influences are largely related to the dynamic and changeable nature of the social and cultural systems.

The combined effects of sex and gender affect health status, health system responses and health outcomes and lack of attention to these differences in research can contribute to problems of validity, generalisation as well as inappropriate healthcare for women.

The present issue of the Monograph, edited by S. Buist and C.E. Mapp, offers an excellent overview of the present knowledge about sex and gender differences in the different domains of respiratory medicine and aims to contribute to a better "sex and gender perspective" on health and healthcare in clinical practice and research.

E.Wouters
Editor in Chief

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INTRODUCTION

S. Buist, C.E. Mapp, A. Rossi

The idea for this monograph came out of a chance conversation that I had with the Editor in Chief, at the time, A. Rossi. I was musing on the unexpected findings about sex and gender-based differences in the Lung Health Study. We had found that airways hyperresponsiveness to methacholine was more common in women than men (later found to be largely, but not entirely, size related), that women had more difficulty quitting smoking than men and that smoking may be more harmful for women than for men. This led to a discussion about the dearth of information that is available on sex and gender-related differences in pulmonary diseases and the need for more information. A. Rossi contacted C.E. Mapp, asking her to join in the project to edit a monograph on respiratory diseases in women and she was enthusiastic about the proposal.

The purpose of this monograph is to explore the relatively unexplored territory of respiratory diseases specifically in women. Until relatively recently, some respiratory diseases, such as lung cancer and chronic obstructive pulmonary disease (COPD), were thought of as diseases that preferentially affected men, the implication being that men are susceptible to these diseases or, conversely, that women are protected from them. Knowledge about the cause of these diseases led, of course, to the realisation that susceptibility was related to differences in exposure to specific risk factors, in this case to cigarette smoking.

The role of sex or gender in physiological function, disease and response to treatment is gradually being explored. In the process, more and more is being learned about differences between the sexes that help to explain differences in disease prevalence, disease manifestations and response to disease and treatment. There is now recognition that sex influences virtually every biological function, either directly or indirectly.

Different terms are often now used to separate differences between the sexes that are based on biological differences (sex related) from those based on sociocultural differences (gender related). Inevitably the terms "sex" and "gender" are often used loosely and interchangeably. This semantic confusion is not important. Much more important is that this topic is receiving the attention it deserves and that we are learning a lot about how biological and sociocultural differences can profoundly affect every aspect of our health and our response to disease and treatment. One practical consequence of this new realisation is that researchers now study both females and males, looking for differences that are not simply related to size. For example, women are now included in clinical trials when, in the recent past, many major trials enrolled mostly men. Another example is that attention is being paid to differences between the sexes in use of healthcare and in response to medications. Sex and gender differences are recognised as being as important as racial and ethnic differences.

In this Monograph, we have invited several authorities to write about the effect of sex or gender in their specific area of interest. We have divided up the monograph into chapters that address general topics, such as sex differences in the anatomy and physiology of the lungs, chapters that address specific diseases, such as tuberculosis, COPD, asthma, occupational lung disease and lung cancer and chapters that address gender-related differences in behaviours, such as adherence to medication.

This monograph should remind us that women and men and girls and boys are indeed

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different and that these differences may be "hard-wired" by true biological differences that may relate to hormonal effects, to differences in anatomy or to differences in genetic susceptibility. However, they may also be due to differences in exposure that may be culturally related, different approaches to disease, including greater reluctance on the part of women in developing countries to present to healthcare workers or to differences in the way women are treated once they present. An important example of this complexity can be seen in the chapter "Tuberculosis in women". The authors point out that differences between males and females in the recognition and reporting of tuberculosis may be largely due to socioeconomic and cultural differences, but biological mechanisms, such as hormonal or genetic susceptibility, may also be responsible.

Thus, the many differences that are being reported between the sexes in all aspects of biology and behaviour are often complicated. Finding the differences and the reasons for them is the first important step. Next, we need to be equally diligent in looking for sex and gender-specific solutions and interventions.

PHILOSOPHICAL INTRODUCTION

As long as there is breath

M. Bovo

Dr in philosophy, Padua, Italy.

φαίνεταί μοι κῆνος ἴσος θέοισιν
ἔμμεν' ὤνηρ, ὄττις ἐνάντιός τοι
ἰσδάνει καὶ πλάσιον ἆδυ φωνεί-
σας ὐπακούει
καὶ γελαίσας ίμέροεν, τό μ' ἦ μὰν
καρδίαν ἐν στήθεσιν ἐπτόαισεν,
ὠς γὰρ ἔς σ' ἴδω βρόχε' ὠς με φώναι-
σ' οὐδ' ἔν ἔτ' εἴκει,
ἀλλ' ἄκαν μὲν γλῶσσα ?ἔαγε λέπτον
δ' αὔτικα χρῶι πῦρ ὐπαδεδρόμηκεν,
ὀππάτεσσι δ' οὐδ' ἔν ὄρημμ', ἐπιρρόμ-
βεισι δ' ἄκουαι,
?έκαδε μ' ἴδρως ψῦχρος κακχέεται? τρόμος δέ
παῖσαν ἄγρει, χλωροτέρα δὲ ποίας
ἔμμι, τεθνάκην δ' ὀλίγω ' πιδεύης
φαίνομ' ἔμ' αὐται.
ἀλλὰ πὰν τόλματον ἐπεὶ ?καὶ πένητα

Fragment 31. *Sappho et Alcaeus. Fragmenta*, Amsterdam 1971 (E.M. Voigt).

These lines come to us from the remotest times of Mediterranean culture. A woman of culture, a poet, uses her voice to speak of discomfort in breathing caused by love. The difficulty, expressed here in an almost musical crescendo, is due, thank God, to the suffering caused by feelings, but the phenomenology is the same in every respiratory disturbance. Evidently the problem results from a total exchange between the "soma" (body) and the atmosphere, that is, the ether.

The air, in making life possible, either permits or inhibits communication. Air, of the four elements of the *physis*, is the lightest, the least accessible to the senses, the opposite of the material, but it is the medium by which living beings share the world. Air coincides with what we call space and as such, is what separates us from objects and other people. It also indicates the quality of the environment and its ability to make us feel well. In our language we distinguish between "clean air" and "stale air" to mean, respectively, a situation of well-being or one of constriction.

In the increasingly polluted and heavy atmosphere of the industrialised world, a stroll is seldom an experience of liberating lightness. We fill our lungs willingly only when we

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find ourselves in clean places, silent places where we hear the sound of the wind, which is the breath of the planet.

The exchange with the outside world, the essence of breathing, is an instinct expressed in natural rhythms we notice only in unusual moments, that is, when discomfort interrupts the normal course, and our attention focuses on the details of such an apparently automatic and simple activity.

We then reflect that each of us is given a limited number of breaths and that breathing had its beginning in a separation, that of the mother from her creature. It also ends in a separation, our separation from the world. Separation has connotations of pain, but it is necessary to be independent and free, and hence to communicate. Only through separation can we build our individuality, and only in freedom can a real exchange between people take place.

Every time events, caused by the environment, illness or the psyche, alter the balance between our body and the air, we have very unpleasant, sometimes dramatic, sensations. These sensations involve our being in its vital functioning and disturb the psyche to the point of causing pathologies. "Gasping for air" is what we instinctively do when things oppress us, when we feel the threat of suffocation, of paralysing pain.

And women, how do they manage breathing? Is there a difference between women and men in their relationship to air? Women are often heard to refer to their breathing difficulties: a common phrase is "I'm in need of air", or, referring to an oppressive woman, a frequently used expression is, "She doesn't let you breathe".

Obviously, communication with the world and others leads to the complex area of liberty and autonomy; women, in their social and personal lives, are not always able to free themselves from their conditioning and express their own identity. For this reason a woman can feel caught in a trap or tend not to leave herself space.

Since the final decades of the last century, both social and personal relationships have changed so much, at least in the west, that the "rules" of behaviour have been turned upside down. In social and work settings women have had to accept a competitive system that has little to do with their way of being and some have become more aggressive than males. Both the emotional and home life follow unnatural rhythms and our private sphere no longer has precise limits, having expanded to merge with our social life. Life is in danger of becoming a theatre, where one must be believable in playing a role, where women may be faced with difficulty and feel anxious, where at times they do not believe in themselves and are scared of their own abilities, almost as if afraid of leaving the nest and taking to the air.

To breathe, to feel the passing of time, to move through space while keeping a space for oneself is sometimes very difficult. Our constant search for the meditative wisdom of other cultures is not casual, we aspire to regain the awareness of the "inside self" and "external self". The sense of space derived from freedom is, in effect, a cultural phenomenon. Through this, women have learnt to overcome their fears and feelings of guilt and have discovered a considerable talent for dealing with complexities, perseverance in pursuing their objectives and a sense of proportion. They never entirely give up their personal life or lose sight of the important things in daily living.

There are parts of the world where "breathing" is denied to women and they are deprived of the right to communicate. A woman who lives under a burqa breathes her own recycled breath, her own vital lymph, instead of pure air. She is deprived of that element of the *physis*, which permits a proper exchange with the external, and she is condemned to communicate with herself or with an authoritarian world. Her condition radically disturbs her psychosomatic relationship with her environment and develops a cruel insecurity, it confuses her sense of self with her sense of "other", making an open rebellion impossible and favouring an unhealthy affection for the object that imprisons her. Yet many Afghan women have been able to make their voice heard.

The voice, *principium individuationis,* is the expression in sound of what originates within our respiratory apparatus. It demonstrates the human ability to give a name to things, people and animals, to celebrate through song one's own joy, pain and holiness. Since ancient times, women have been given the task of expressing the feelings of the community during ceremonies, both in good and bad times. In many societies these customs are still present today and it is impressive, for an outsider, to hear the guttural, obsessive cries of Arab girls during weddings and feasts. However, when used autonomously, the female voice has often not received a reply or has even been ordered to be silent in an authoritarian manner. It is also said women spend too much breath on speaking, as if to say they have an incorrigible tendency to waste time.

Women's words were for a long time the only words addressed to small children, the intermediary between children and the world, through their stories, reading, teaching and laughter. Even today a woman's voice is almost the only one we hear in hospital wards. Women are automatically assigned the care of ill family members, a difficult task that requires great strength of spirit.

At this moment many Israeli and Palestinian women are speaking to each other. They have a tenacious wish to continue to the exchange of their views on the absurdity that has curtailed their lives and those of their children. In so doing, they defy the anger of their husbands (because, as we know, men have "clear ideas") and risk the hatred of their neighbours and relatives. Wherever there is war, women wonder more about the reasons for the hatred than about which side is right.

Our hope is that sooner or later we stop thinking that all this talk is a waste of time and breath and we continue to do it, "as long as there is breath".