ABOUT GENDER AND HEALTH

Elena García-Vega

University of Oviedo

The aim of this work is to encourage consideration of the need to mainstream gender in health research. The concept of gender concerns neither men nor women per se, but rather the relationships of inequality between the male and female contexts, in terms of the distribution of resources, responsibilities and power. Gender equity in relation to health status refers to the achievement by men and women of comparable levels of physical, psychological and social well-being. Thus, it must be understood as involving the elimination of unnecessary, avoidable and unjust disparities between men and women. Approaches to some of the health areas discussed here could be changed by taking into account the gender variable. **Key words:** Gender, Health, Male, Female.

El objetivo de este trabajo es reflexionar sobre la necesidad de incorporar la perspectiva de género en las investigaciones sobre salud. El concepto de género no equivale a mujer, ni tampoco a hombre, sino a las relaciones de desigualdad entre los ámbitos masculinos y femeninos, en torno a la distribución de los recursos, las responsabilidades y el poder. En el estado de salud la equidad de género encauza el logro, por parte de hombres y mujeres, de niveles comparables de bienestar físico, psicológico y social. Así pues, la equidad de género en el ámbito de la salud debe entenderse como la eliminación de aquellas disparidades innecesarias, evitables e injustas entre mujeres y hombres. De manera ilustrativa se refieren algunos tópicos en salud y su diferente abordaje si se contempla la variable género.

Palabras clave: Género, Salud, Masculinidad, Feminidad.

he Fourth World Conference on Women that took place in Beijing in 1995 saw a renewed commitment by the international community to achieve gender equality, in addition to development and peace for all women. At the same conference, governments and other relevant agents were urged to integrate the gender perspective into all their policies and programmes so as to analyze the consequences for women and men, respectively, before making decisions. Since that time, the research field on processes related to gender inequalities in health has expanded considerably. As Lamas remarks, "understanding the true difference between sexed bodies and socially constructed beings is among the most intriguing questions we are faced with as humans" (Lamas, 1996). However, the umbrella term "gender and health studies" covers a broad spectrum of research, from studies which simply divide up the population by sex to more recent ones which incorporate the gender paradigm. But even in the latter group there is great diversity. Thus, we find an abundance of literature on women's health, covering such aspects as cervical cancer, the menopause, abortion, and so on - referring to biological factors of female physiology (in hormone- and reproduction-related terms) – and on men's health, referring to factors of a more bio-psycho-social nature (e.g., lifestyle).

In any case, and in general, there is a consensus in the research that men's and women's health are different and unequal. Different, because there are biological factors (genetic, hereditary, physiological, etc.) that manifest themselves in different ways, in relation to both health and risk of illness. And unequal, because there are other factors that are partly explained by gender, and which influence people's health in an unfair manner (Rohlfs, Borrell, & Fonseca, 2000).

We therefore propose an approach to health from a gender-based perspective. This implies, on the one hand, a dynamic concept of health, with a bio-psycho-social perspective (Engel, 1977), as proposed by the World Health Organization (WHO) in 1984: "A new conception of health as the extent to which an individual or group is able to realize aspirations and satisfy needs, and to change or cope with the environment. Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and personal resources, as well as physical capacities".

And in accordance with the WHO's declaration of principles for progressing toward gender equality, which has imbued the organization's successive recommendations (WHO, 2002, 2003 and 2008): "To

Correspondence: Elena García-Vega. Facultad de Psicología. Universidad de Oviedo. Plaza Feijoo s/n. 33003 Oviedo. España. E-mail: elenagv@uniovi.es

achieve the highest standard of health, health policies have to recognize that women and men, owing to their biological differences and their gender roles, have different needs, obstacles and opportunities".

And on the other hand, this analysis implies a genderbased approach - based on the notion that one thing is the sexual difference, and quite another are the attributions. ideas, representations and social prescriptions constructed on the basis of taking sexual difference as a reference: assuming, that is, the existential conditions of men and women to be different. According to the second report by the Spanish Health Ministry's Observatory on Women's Health from 2006 "Health and gender 2006: The central ages of life" (Ministerio de Sanidad y Consumo, 2006), factors such as caregiver burnout, reproductive issues, unpaid tasks, situations of subordination, abuse and gender-related violence, the "double working day", competitiveness, the thin body ideal and the quest for eternal youth can help to explain why women have poorer health and lower healthy-life expectancy. In the case of men, the maintenance of power relations, the success ideal and competitiveness help to explain the ways in which they become ill.

To the reader who might inquire as to the relevance of such studies, we would respond by saying that, in general, we believe this type of research can help to explain how gender leads to disparities in quality of life, health and well-being. It can be just as dangerous in the study of health to assume equality between men and women where there are genuine differences - many clinical studies, for example, have been carried out only with men (and indeed, white men aged around 35), assuming that the results could be automatically applied to women (Ruiz & Verbrugge, 1997) – as it is to assume total inequality where there are similarities; for example, on considering statistical data, different illnesses are often taken to be characteristic of one sex or the other, so that similar problems receive different diagnoses (Ruiz & Verbrugge, 1997). Research from a gender-based perspective can contribute to clarifying this situation and others. So-called mainstreaming gender equity in health is a fundamental part of the WHO's recommendations, and also of EU policy guidelines. The more we learn about the biological and social determining factors of both health and illness, the more we shall advance toward the design of health programmes and policies for improving quality of life, avoiding or minimizing the effects of illness and eliminating health inequalities between women and men (Rohlfs, Borrell, & Fonseca, 2000).

By way of illustration we shall now consider some contributions from the gender paradigm, so that the reader can reflect on the appropriateness of incorporating them in psychology research. Various health topics – though the list is far from exhaustive – are discussed from a gender perspective.

CARDIOVASCULAR DISEASES

Cardiovascular diseases (CVD) are the primary cause of death in women and men in Spain, with figures of 30% in either case (Ministerio de Sanidad y Consumo, 2006). Even so, there is a popular belief that such conditions primarily affect males. This may be explained in various ways. For example, they appear in different age ranges in men and women. In general, CVDs appear later in women, this later onset being associated with the loss of female hormones after the menopause. However, though this tendency has long been widely accepted, it is beginning to be called into question in the wake of studies, for instance, on hormone replacement therapy for women undergoing the menopause, which far from continuing to protect them from vascular risk, appears to increase such risk. In any case, since pioneering research such as the famous Framingham Study from 1948 (Dawber, 1980) there has been a consensus amona researchers on the existence not only of numerous physical variables, such as age, sex, smoking, sedentary lifestyle, dyslipidaemia (together with comorbid conditions like high blood pressure and diabetes mellitus, diet, physical exercise or abdominal fat), but also of psychological, cultural and socio-economic factors. The majority of these "risk factors for cardiovascular diseases" are controllable or modifiable (except age and sex), hence their relevance in health-related policies and preventive initiatives. And such factors can obviously affect men and women alike. Nevertheless, their presence is unequal, so that, for example, cigarettes and alcohol are generally more widely consumed among men, whilst women tend to have more abdominal fat and do less physical exercise.

This alone would indicate a need to consider differential intervention approaches and therapeutic guidelines. But the way in which the symptoms develop in the two sexes presents an even greater challenge.

The condition typical in men has been taken as the pattern (known as typical course); thus, the standard

Regular articles

condition considered is usually precordial chest pain triggered by effort, spreading to the jaw and/or left arm, accompanied by vagal symptoms, such nausea/vomiting and shortness of breath or dyspnoea. This manifestation does not necessarily correspond to that of women, which tends to be defined - mistakenly - in two ways: atypical or abnormal. Precordial pain in women may be non-ischemic in origin, as in the case of mitral valve prolapse. It is more common in women during repose or related to psychosocial stress, and the electrocardiogram at rest tends to be normal (Rohlfs et al., 2004). Such differences may be influencing the tendency of women to seek medical assistance later than men, with all the consequences that this involves (Rohlfs et al., 2004). In this regard, authors such as Wenger (1999) have established differential clinical attention guidelines. Wenger makes two important points: a) in many women, the aetiology of chest pain, clinically indistinguishable from angina, is unrelated to significant arteriosclerotic obstruction of the coronary arteries, and to establish this aetiology, in addition to the clinical history, objective diagnostic tests are necessary, and b) whilst the prognosis for many women with chest pain may be benign, women in whom such pain reflects arteriosclerotic heart disease show a less favourable course of the condition than men in a similar situation (Wenger, 1999).

Given the above, there is quite clearly a need to approach these conditions from a gender-based perspective.

OSTEOPOROSIS

Osteoporosis is characterized by reduced bone mass and increased risk of fractures. Both bone intensity and bone quality are taken into account. If, as mentioned above, cardiovascular diseases tend to be popularly associated with men, osteoporosis tends to be associated with women (though in the latter case this is closer to the reality); in addition, research has focused mainly on postmenopausal English-speaking women (Alonso González, Vázquez, & Molina 2009), so that the results are difficult to generalize to men or people aged under 50. According to the WHO, the prevalence of osteoporosis is estimated at 30% in white Caucasian women and 8% in white Caucasian men aged over 50, and rises to as much as 50% in women over 70. However, while it is true that in men there is less loss of bone mass than in women, osteoporosis in males presents higher morbi-mortality. Mortality due to hip fracture in men with osteoporosis is double that of women. Given the greater bone mass in men, osteoporotic fractures tend to occur around ten years later than in women, that is, close to age 75. At the time of sustaining a hip fracture men have higher rates of morbidity and mortality than women. For example, men are twice as likely to die in hospital after breaking their hip. Likewise, mortality due to hip fracture among men, one year after the fracture, is 31%, compared to 17% in women. This higher mortality is usually attributed to their advanced age at the time of the fracture and the presence of comorbid conditions (Dennison, Mohamed, & Cooper, 2006).

STRESS, HEALTH AND GENDER

The relationship between stress (generally identifying stress with distress) and health is a basic area of research in psychology and medicine; a somewhat more novel aspect is the analysis of those stressful situations in which gender emerges as a fundamental factor. There is no universally accepted model that explains all aspects of how stress works, but by way of a general summary we can say that people are considered to be in a stressful situation or subject to a stressor when they have to deal with situations involving behavioural demands that are difficult for them to put into practice or satisfy (always taking into account a whole range of modulating variables, such as social support, personality, resilience, and so on) (Cooper, Sloan, & Williams, 1988).

Since the 1980s, scientific research has revealed gender differences, both in exposure to psychological stress and in the psychological and physiological responses to it, and has shown how this can affect men and women differentially (Frankenhaeuser, 1991, 1996).

As regards stressful situations, we can consider research on stress and gender in terms of three broad fields: workrelated stress, in a wide sense, referring to difficulties with the job itself, to excessive demands, to bullying/harassment, and so on; stress associated with one's work-life (or work-family) balance (which would include taking into account the so-called "double-working day" for women); and stress deriving from gender-related violence.

Furthermore, it has been found that women cope less adequately with stress. Various authors have suggested that the influence of gender on the stress process may be conditioned by traditional patterns of socialization. Women's traditional role prescribes dependence, affiliation, emotional expressiveness, lack of assertiveness and subordination of one's own needs to those of others. The traditional male role, on the other hand, prescribes attributes such as independence, self-confidence, assertiveness, goal orientation and instrumentality, making it difficult for men to accept and express feelings of weakness, incompetence and fear, whilst for women it would be more difficult to take up an active position in problem-solving (Matud, 2004; Matud, Guerrero, & Matías, 2006). In sum, it would appear that male strategies are predominantly active, not emotive, while women's are mainly affective. In accordance with this, the stressors to which they refer are also different, so that men tend to talk about work-related and financial problems, and women about relationship problems, emotional loss, and so on (Clemente, Córdoba, & Gimeno, 2003).

Research has also found – though not unanimously – that women present more stress than men, especially chronic stress. Thus, for example, Epel's study (Epel et al., 2004) revealed that the blood cells of women who had spent most of their lives looking after a disabled child were, genetically speaking, ten years older than the same types of cell in women who had spent less time doing this difficult task.

As Lundberg and Frankenhaeuser (1994, 1999) conclude, stress deriving from work burnout and role conflict may constitute a significant causal factor in the higher incidence of health problems among women compared to men; moreover, it would go a long way to explaining the mental and physical symptoms, illness and work absence found in the female population.

The above brief analysis reveals the great significance of stress (or distress) and the need to understand its different dimensions, including that of gender.

GENDER AND MENTAL HEALTH

According to the results of the European Study of the Epidemiology of Mental Disorders (ESEMeD) from the year 2000, carried out in various European countries (Belgium, France, German, Italy, Holland and Spain), 11.5% of the population have been diagnosed with some mental disorder in the last year, and 25.9% at some time in their life (Alonso et al., 2004). It has also been observed that the prevalence of the disorders is different between men and women: in childhood, the prevalence of antisocial behaviour and aggressive behaviour disorder, for example, is higher in boys than in girls, while in adolescence, the prevalence of depression and eating disorders is greater in girls than in boys. In the case of adults, it has consistently been found that women are more likely than men to suffer from anxiety and depression, whilst men present higher rates of antisocial personality disorder and substance abuse (Altemus, 2009; WHO, 2001). The explanatory factors for these differences appear to be of both a biological (genetic predisposition, sex hormones, endocrinal reactivity to stress, etc.) and social nature (educational level, financial status, social support, sexual role, etc.); as Dalla and Shors (2009) point out, it would be interesting to ascertain which of these factors are susceptible to change and which are not.

Regular articles

It is in this regard that a gender perspective can throw light on the field, given that being a man or a woman can influence not only the prevalence of mental disorders, but also the manifestation and expression of symptoms. For example, women present more internalizing disorders and men more externalizing disorders (Lemos, 2003). Differences have also been observed in disposition to seek medical or psychological help, in the course of the illness, and even in the response to treatment. Some studies (Ciranowsky, Frank, Young, & Shear, 2000; Gaytán, 1997; Gómez, 2002; Matud, Guerrero, & Matías, 2006; Sweeting & West, 2003) have suggested that women have traditionally been more frequently diagnosed with mental health problems than men, and that women are more likely to seek help and to talk about such problems to their GP; men, on the other hand, are more likely to present alcohol-related problems.

OTHERS

Clearly, any type of health problem can be analyzed from a gender perspective. Here we include some brief references to research on other aspects:

- ✓ Gastrointestinal disorders: irritable bowel syndrome has been associated with the type of stress women tend to experience (Chang & Heitkemper, 2002; Chial & Camilleri, 2002), and gastric ulcer with the typical male lifestyle.
- ✓ Type 2 diabetes: greater vulnerability has been observed in women in relation to the control of glycaemia and associated complications (Lidfeldt, Nerbrand, Samsioe, & Agardh, 2005; Méndez-López, Gómez-López, García-Ruiz, Pérez-López, & Navarrete-Escobar, 2004).
- ✓ HIV/AIDS: García-Sánchez's (2004) review of studies on vulnerability to HIV/AIDS in relation to gender reveals that there are biological and social

Regular articles

factors which favour the transmission of HIV and contraction of the illness in women. Prominent among these would be anatomical differences, the stage of the illness, the presence of other STDs, the nature and frequency of sexual relations, social inequality and poverty, and low perceived risk of infection.

 Differences in response to medication (Anderson, 2008; Franconi, Brunelleschi, Steardo, & Cuomo, 2007; Tanaka, 1999), to pain (Averbuch & Katzper, 2000) and to placebo effect (Saxon, Hiltunen, Hjemdahl, & Borg, 2001).

In sum, research appears to show that including the gender variable in analyses can lead to a better understanding of various types of health problems.

CLOSING REMARKS

Until practically the 1990s, both medicine and psychology research had taken males as the pattern for studying the aetiology, course and treatment of illness and disease (Arenas & Puigcerver, 2009; Hughes, 2007; Oertelt-Prigione, Parol, Krohn, Preißner, & Regitz-Zagrosek, 2010). In the present article we have discussed some health research topics in an attempt to highlight how misleading an approach that lacks a gender perspective can be.

The Spanish Health Ministry's report *Health and gender* 2006: The central ages of life looks at people in the age range 45 to 65, concluding that women in this group are clearly disadvantaged in terms of health and quality of life. Its major points include the following:

- a) Women are more prone to chronic illnesses (60%) than men, and have a poorer perception of their own health. Disability rates are 10 per cent higher in women than in men.
- b) Men present more serious pathologies and higher rates of mortality.
- c) Women live a mean of 6.6 years more than men, but tend to have more "nagging ailments". In the age range considered, they have twice as much pain as men. Foremost among such pain would be musculoskeletal pain (46%), headaches, and pain deriving from varicose veins or mental problems.
- d) Somatic symptoms without organic cause are less frequent in men, as are depression and anxiety.
- e) Women take more psychoactive medication than men, and account for 75% of all consumers of sleeping tablets and tranquillizers.
- f) As regards cause of death, the report reveals that the

286

principal causes are tumours (breast cancer in women and lung cancer in men) and circulatory system conditions.

The study of health status in a population from a gender perspective reveals that women – of any age – tend to present lower mortality rates than men, but greater morbidity, which is expressed in a higher incidence of acute disorders, greater prevalence of non-fatal chronic disorders and higher levels of disability. The incorporation of such gender-related information – and knowledge about the inequities it reveals – in the training of healthcare personnel and researchers would undoubtedly result in better care quality and a less biased perspective on health. The findings from research on gender and health discussed here should serve as a starting point to continue exploring the relationship between the two, and for promoting equity in this field.

In any case, it is important to point out some limitations of the studies discussed, though these limitations in no way undermine the enormous importance of such research. The major problem concerns the gender analysis itself, since it tends to be made on the basis of sex. It is difficult to distinguish what is attributable to biological differences and what to psychosocial differences, and it is this difficulty that is behind the practical absence of measurement instruments. The few studies that have attempted to introduce some sort of control found that the results tend to become homogenous when the issue is approached using samples of men and women with similar "social roles". For example, research usually compares samples of women doing primarily domestic tasks with men who are mostly in paid employment. But when samples are carefully matched men and women doing paid work, men and women as homemakers - we can observe greater equality in the disorders presented by the two sexes, and this would support the relevance of the analysis of gender and its influence on health (Emslie et al., 2002; Matud & Aguilera, 2009).

REFERENCES

- Alonso González, L., Vázquez, G.M, & Molina, J.F. (2009). Epidemiología de la osteoporosis [The epidemiology of osteoporosis]. *Revista Colombiana de Reumatología*, 16(1), 61-75.
- Alonso, J., Angermeyer, M.C., Bernert, S., Bruffaerts, R., Brugha, T.S., Bryson, H., et al. (2004). Prevalence of mental disorders in Europe: Results from the European

Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatrica Scandinavica, 109 (Suppl. 420), 21–27.

- Altemus, M. (2009). Neurobiology, sex and gender. In W.E. Narrow, M.B. First, P.J. Sirovatka, & D.A. Regier (Eds.), Age and gender considerations in psychiatric diagnosis. A research agenda for DSM-V. Arlington, VA: American Psychiatric Association.
- Anderson, G.D. (2008). Gender differences in pharmacological response. International Review of Neurobiology, 83, 1-10.
- Arenas, M.C., & Puigcerver, A. (2009). Diferencias entre hombres y mujeres en los trastornos de ansiedad: una aproximación psicobiológica [Differences between men and women in anxiety disorders: a psychobiological approach]. Escritos de Psicología, 3(1), 20-29.
- Averbuch, M., & Katzper, M. (2000). A search for sex differences in response to analgesia. Archives of Internal Medicine, 160(22), 3424-3428.
- Chang, L., & Heitkemper, M.M. (2002). Gender differences in irritable bowel syndrome. *Gastroenterology*, *123*(5), 1686-1701.
- Chial, H.J., & Camilleri, M. (2002). Gender differences in irritable bowel syndrome. *Journal of Gender-Specific Medicine, 5*(3), 37-45.
- Clemente, A., Córdoba, A. I., & Gimeno, A. (2003). Diferencias en la percepción de influencia de los acontecimientos vitales en hombres y mujeres [Differences in the perceived influence of life events in men and women]. *Revista Latinoamericana de Psicología, 35*, 19-26.
- Dalla, C., & Shors, T.J. (2009). Sex differences in learning processes of classical and operant conditioning. *Physiology and Behavior*, 97, 229-238.
- Dawber T.R. (1980). The Framingham study: the epidemiology of atherosclerotic disease. Cambridge: Harvard University Press.
- Dennison, E., Mohamed, M.A., & Cooper, C. (2006). Epidemiology of osteoporosis. *Rheumatic Disease Clinics of North America*, 32, 617-629.
- Emslie, C., Fuhrer, R., Hunt, K., Macintyre, S., Shipley, M., & Stansfeld, S. (2002). Gender differences in mental health: evidence from three organisations. *Social Science and Medicine*, 54(4), 621-624.
- Engel, G.L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, *19*, 129–236.
- Epel, E.S., Blackburn, E.H., Lin, J., Dhabhar, F.S., Adler,

N.E., Morrow, J.D., & Cawthon, R.M. (2004). Accelerated telomere shortening in response to life stress. *Proceedings of the National Academy of Sciences of the USA*, 101(49), 17312-17315.

Regular articles

- Franconi, F., Brunelleschi, S., Steardo, L, & Cuomo, V. (2007). Gender differences in drug responses. *Pharmacological Research, 55*(2), 81-95.
- Frankenhaeuser, M. (1991). The psychophysiology of workload stress and health. Comparison between the sexes. Annals of Behavioral Medicine, 13(4), 197-204.
- Frankenhaeuser, M. (1996). Stress and gender. European Review, 4, 313-327.
- García-Sánchez, I. (2004). Diferencias de género en el VIH/SIDA [Gender differences in HIV/AIDS]. Gaceta Sanitaria, 18 (Suppl. 2), 47-54.
- Gómez, E. (2002). Género, equidad y acceso a los servicios de salud: una aproximación empírica [Gender, equity and access to health services: an empirical approach]. *Revista Panamericana de Salud Pública, 11*, nº 5-6.
- Hughes, R.N. (2007). Sex does matter: comments on the prevalence of male-only investigations of drug effects on rodent behaviour. *Behavioural Pharmacology*, *18*, 583-589.
- Lamas, M. (Ed.) (1996). El género. La construcción cultural de la diferencia sexual [Gender. The cultural construction of sexual difference]. Mexico D.F.: Pueg-Porrúa.
- Lemos, S. (2003). La psicopatología de la infancia y la adolescencia: Consideraciones básicas para su estudio [Psychopathology of childhood and adolescence. Basic considerations for the study of this field]. Papeles del Psicólogo, 85, 11-18.
- Lidfeldt, J., Nerbrand, C., Samsioe, G., & Agardh, C.D. (2005). Women living alone have an increased risk to develop diabetes, which is explained mainly by lifestyle factors. *Diabetes Care, 28*(10), 2531-2536.
- Lundberg, U., and Frankenhaeuser, M (1999). Stress and workload of men and women in high-ranking positions. *Journal of Occupational Health Psychology*, 4(2), 142-151.
- Lundberg, U., Mardberg, B., & Frankenhaeuser, M. (1994). The total workload of male and female white collar workers as related to age, occupational level and number of children. *Scandinavian Journal of Psychology*, 35, 315-327.
- Matud, M. P. (2004). Género [Gender]. In M. P. Matud,

Regular articles

R. J. Marrero, & M. Carballeira, *Psicología Diferencial* [*Differential Psychology*]. Madrid: Biblioteca Nueva.

- Matud, M. P., Guerrero, K., & Matías, R. G. (2006). Relevancia de las variables sociodemográficas en las diferencias de género en depresión [Relevance of socio-demographic variables in gender differences associated with depression]. International Journal of Clinical and Health Psychology, 6, 7-21.
- Matud, M.P., & Aguilera, L. (2009). Roles sexuales y salud mental en una muestra de la población general española [Sex roles and mental health in a sample of the general Spanish population]. *Salud Mental, 32*, 53-58.
- Méndez-López, D.M., Gómez-López, V.M., García-Ruiz, M.E., Pérez-López, J.H., & Navarrete-Escobar, A. (2004). Disfunción familiar y control del paciente diabético tipo 2 [Family dysfunction and control of type 2 diabetes patients]. *Revista Médica del Instituto Mexicano del Seguro Social*, 42(4), 281-284.
- Ministerio de Sanidad y Consumo (2006). Informe salud y género. Observatorio de salud de la mujer [Report on health and gender. Observatory on Women's Health]. Retrieved from http://www.msc.es/organizacion/ sns/planCalidadSNS/
- Oertelt-Prigione, S., Parol, R., Krohn, S., Preißner, R., & Regitz-Zagrosek, V. (2010). Analysis of sex and genderspecific research reveals a common increase in publications and marked differences between disciplines. Retrieved from http://www.biomedcentral.com/1741-7015/8/70
- Paoletti, R., & Wenger, N. (2003). Review of the international position paper on women's health and menopause. A comprehensive approach. *Circulation*, 107, 1336-1339.
- Rohlfs, I., Borrell, C., & Fonseca, M.C. (2000). Género, desigualdades y salud pública: conocimientos y desconocimientos [Gender, inequalities and public

health: the known and the unknown]. Gaceta Sanitaria, 14 (Suppl. 3), 60-71.

- Ruíz, M.T. & Verbrugge, L.M. (1997). A two way view of gender bias in medicine. Journal of Epidemiology & Community Health, 51(2), 106-109.
- Saxon, L., Hiltunen, A.J., Hjemdahl, P., & Borg, S. (2001). Gender-related differences in response to placebo in benzodiazepine withdrawal: A single-blind pilot study. *Psychopharmacology*, 153, 231-237.
- Tanaka, E. (1999). Gender-related differences in pharmacokinetics and their clinical significance. Journal of Clinical Pharmacy and Therapeutics, 24, 339–346.
- United Nations (1985). Strategies for the advancement of women. Nairobi: United Nations.
- Wenger, N. (1999). Cardiopatía en la mujer: la evolución del conocimiento está modificando extraordinariamente la asistencia clínica [Cardiopathy in women: improved knowledge is bringing about extraordinary changes in clinical care]. In D.G. Julian, & N. Wenger (Eds.). Cardiopatía en la mujer [Cardiopathy in women]. Barcelona: Edika Med.
- World Health Organization (2001). The World Health Report 2001 - Mental Health: New Understanding, New Hope. Retrieved from http://www.who.int/ whr/2001/en
- World Health Organization (2002). Gender and Mental Health. Geneva: WHO.
- World Health Organization (2003). Why gender and health? Retrieved from http://www.Who.int/gender/ henderandhealth.html.
- World Health Organization (2008). Closing the gap in a generation. Health equity through action on the social determinants of health. Report from the Commission on Social Determinants of Health. Retrieved from http://www.who.int/social_determinants/final_report /csdh_finalreport_2008.pdf