

Factors Related to Gender Inequalities in the Management of Ischemic Heart Disease

Marta Ferraz Torres*

Emergency Nursing un complejo hospitalario de navarra, Navarra, Spain

*Corresponding author: Marta Ferraz Torres, Emergency Nursing un complejo hospitalario de navarra, Navarra, Spain, Tel: +34 628813974; E-mail: martaf342@gmail.com

Received date: May 20, 2016; Accepted date: June 29, 2016; Published date: June 30, 2016

Copyright: © 2016 Torres MF. This is an open -access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Introduction: Historically, epidemiological health studies –mainly research on coronary heart disease– have focused their analysis in the male population. With this, the biological characteristics and psychosocial aspects of women have remained invisible to the patterns of health and disease, thereby generating significant differences in the treatment and outcome of these pathologies according to sex.

Methodology: A qualitative descriptive analysis were carried out using phenomenological methodology by conducting semi-structured interviews with patients affected with ischemic heart disease (IHD), doctors, A&E service workers of the Hospital X (CHX) from 1 January 2013 until August of that year.

Results: Both men and women referred to suspecting that the process entailed a cardiac problem. By contrast, women have confirmed that they consciously delayed the request for medical aid. Doctors expressed the idea that women are more "histrionic" and that it is men who delay the request for medical aid.

Conclusion: Differences of perception and action generated by doctors, together with the difference in actions by patients according to sex lead to gender inequality that harms the evolution of women where these pathologies are concerned.

Keywords: Ischemic Heart Disease; Inequality; Gender; Causes

Introduction

Although in the last 40 years there has been an improvement in diagnosis and treatment, leading to a decline in mortality, improvements in this field is still scarce. The promotion of health and prevention of these illnesses should be strengthened at primary care level, allowing a balance between the prevention activities and those of follow-up and treatment of this type of patient [1,2].

In our environment, it is estimated that every year cardiovascular diseases cause, in total, around 4 million deaths in Europe and 1.9 million deaths in the European Union, most of them due to coronary illness (CI)3, which is 47% of all deaths in Europe and 40% in the European Union [3].

Within the gender perspective, it is estimated that almost half of the middle-aged men and a third of the middle-aged women in the United States will suffer some manifestation of ischemic heart disease [4].

These existing differences and inequalities due to gender can be understood through the studies which take into account the biological and social factors that affect men and women unequally.

Historically, epidemiology studies have focused their analysis on an exclusively male population. The basic study pattern has focused on a male profile, so women have been under-represented at biological level [4].

This generalization has produced disparities, thus masking the differences occurring naturally based on gender and which are present both in healthy periods and periods of illness in every human being. These gender differences do not act in an isolated way. Gender inequalities, such as the socio-economic level, ethnic group or religion are determining factors for society and generate very different health and illness experiences for each individual [5,6].

Differences due to gender in CI detected in other studies [7-10] have allowed us to observe a difference in treatment between men and women. A lesser application of drugs and invasive techniques has been registered (fibrinolysis, primary angioplasty or rescue angioplasty) in women, having repercussions in a worse evolution of their pathology.

Likewise, the psychosocial and emotional aspects, which also generate divergence in the health of individuals according to gender [11], are often invisible to the health and illness of the patient.

Although there is increasing evidence of these social inequalities, it remains to discover how they should be approached and treated by health systems. To be able to implement and assess equity policies, we must discover why inequality is generated, the characteristics of the individuals in whom it is present and where and why this inequality lies [12].

The majority of information about coronary morbi-mortality is obtained from data coming from national surveys and observational cohort studies. Although this type of study is very useful, we must be careful when interpreting them. They are uncontrolled studies in which, in many cases, the subjects state the information directly, without filters to check the veracity of said information. Meanwhile,

the generalization of their findings in the general population at other different times from when they were carried out can be dangerous and, in addition, the comparisons between them and the different sexes must be interpreted critically due to biological, socio-cultural and methodological differences.

To achieve this, health organizations and services should be able to discover and understand the differences produced according to sex and according to gender, in such a way that allows the application of the necessary measures to promote equity and equality in health systems [12,13].

According to the analysis of the CI-affected patients themselves according to sex [14-18] great differences have been observed. A greater tardiness is detected in the request for health care on the part of women; actions directly related to the worse evolution of these pathologies in women [12,19-21]. The possible conditioning factors have been related mainly to variables such as age, the female sex, the onset of symptoms in the early hours, the perception of the lack of severity of the symptomatology or lack of knowledge [22-27].

It still remains to get to know in greater depth the reasons for these differences in actions according to sex and gender, as well as the possible factors related to the divergences observed in the treatment and health action according to sex. For this, the aim of this study is to recognize the causes related to this difference in treatments on the part of health professionals and the action carried out according to sex.

Methodology

The purpose of this research was to determine the factors related to the detected differences in health performance and response of the patients themselves by gender. It has been used for qualitative analysis. The methodology used in this study, qualitative analysis, allows to know the phenomenological aspects that are around heart disease and ischemic conditions the action carried out by both health professionals and by patients affected with this disease.

In qualitative analysis the total desired sample is obtained during the study, and in this case, total of [20] interviews which have resulted in saturation data, and consequently, the completion of the collection process information.

Semi-structured interviews have been carried out with patients affected for the first time with CI who attended the accident and emergency service of the referral Hospital Complex of Navarra (NHC) and health professionals, all of them doctors, workers of the same hospital, tertiary hospital, for cardiovascular pathologies in Navarra, during a period of 6 consecutive months.

After carrying out the interviews, they were transcribed and analyzed. This analysis has generated information which, after being grouped into categories, gave diverse results.

Their analysis was carried out consecutively and in pairs by experienced staff, which made possible a correct methodological process. For the patient selection process two aspects were taken into account.

The first element to be evaluated was that the coronary process were newly established to avoid bias in the symptomatology perception or knowledge coming from prior experiences as well as the time of admittance to the unit were no less than 3 days and no more than 5 days to avoid significant variations in the narration of the lived experience.

Secondly, the sex of the patient was taken into account to alternate between sexes, thus maintaining the aim of the study to carry out a sex-based comparison and to obtain the perspective of the lived experience by both men and women.

The doctor selection process was carried out randomly.

The adequacy of the data was considered, both in quality and quantity, upon reaching saturation in the identified categories, thus ensuring the correct methodological execution of the study. This project was a circular process of analysis which obtained results in an emerging rather than a sudden form, which prolonged the study but improved the quality of the data.

Results

The final number of interviews carried out was 20.

This sample is made up of 8 patients, 4 men and 4 women of adult age (Table 1) and 12 doctors (Table 2); all of them, workers at emergency department of NHC with a minimum of two years' experience at care level.

Informant	Sex	Age	Civil status	Educational level	Profession	Place of residence
Patient 1	Male	56	Single	Professional Training	Plumber Temporary sick leave	Pamplona
Patient 2	Female	84	Widow	Primary Studies	Housewife	Estella
Patient 3	M	60	Married	University Studies	Civil engineer Unemployed	Yesa
Patient 4	F	54	Married	University Studies	Economist Temporary sick leave	Olite
Patient 5	M	78	Married	Primary studies	Retired	Guerendiain
Patient 6	F	47	Married	University Studies	Human Resource Management Temporary sick leave	Beriaín
Patient 7	M	71	Married	Primary Studies	Retired	Zizur Mayor
Patient 8	F	79	Married	Primary Studies	Retired	Pamplona

Table 1: Profile of informant "patients".

Patients

The study carried out on the patients generated 4 informative categories, with details below.

Symptomatology: In the interviews carried out with patients, both men and women referred to suspecting at some point that the process entailed a cardiac problem, with a sudden onset, predominantly during the day and during times of little activity, without differences according to sex being observed.

Perception of the process: Both sexes expressed their perception of the process with anxiety and fear. They mention having the feeling from the beginning that it was something serious and that it could have a fatal outcome.

Males mentioned commenting on the pain and the preoccupation lived at the very beginning of the symptomatology to a trusted person, such as their wife, and in the majority of cases it was them who immediately called the emergency services.

Informant	Sex	Age	Specialised training	Professional experience
Doctor 1	M	36	Family doctor R3	3 years
Doctor 2	F	42	Associate family doctor	18 years
Doctor 3	F	39	Associate family doctor	14 years
Doctor 4	M	26	Anaesthetist R2	2 years
Doctor 5	M	42	Associate family doctor	18 years
Doctor 6	M	50	Associate family doctor	26 years
Doctor 7	M	29	Family doctor R4	4 years
Doctor 8	M	28	Family doctor R3	3 years
Doctor 9	F	30	Family doctor R4	4 years
Doctor 10	M	32	Cardiologist R2	2 years
Doctor 11	M	44	Associate family doctor	20 years
Doctor 12	F	31	Family doctor R3	3 years

Table 2: Profile of informant "doctors".

Knowledge of the pathology: Men and women commented that they had some adequate basic knowledge about coronary pathologies and what is an acute myocardial infarction (AMI), which allows them to identify in an early manner the experienced symptomatology as something cardiac; but it is the women who openly say that they act in conflict with stipulated recommendations for these pathologies and delay the request for health care or the help of family members.

Time: The women interviewed confirm that they act consciously; prioritizing the housework they are doing over requesting medical help. They also mention not wanting to be a burden for their family and for that reason they delay asking for help.

Doctors

Meanwhile, the doctors interviewed contribute very valuable information about the perception they have of this problem.

They believe there is a series of aspects that act as conditioners such as the age of the patient, the underlying pathology (factors linked to sex) and the presence of psycho-social factors such as the emotional, cultural and educational level.

What the patient is like: Within the biological factors, the age of the patient in women relating to greater longevity acts as a conditioner in a

greater number of risk factors (RF) and for that reason, as a generator of greater comorbidity in females; a conditioning situation of their more conservative attitudes.

They mention that men present greater underlying pathology showing a greater number of cardiovascular RF (CRF) which leads them to prioritize their care initially and to suspect a coronary process more directly in them.

What the doctor is like: The theoretical knowledge and prior practical experience the professional has in the treatment of these pathologies both in men and in women are conditioning factors in their action with the knowledge and practical management being greater in men.

What the doctor's treatment is like: All the interviewed doctors coincide in that the treatment and evolution of these pathologies is directly conditioned by the time of delay in requesting medical assistance. In general, the greater the evolution of the process, the greater cardiac impact, which drastically conditions the therapeutic action and generates a worse evolutionary prognosis; an aspect observed more frequently in women.

They also expressed the idea that men play down the importance of their process, while women better express the lived-through process and are more "histrionic" and that they take care of and value their health more, meaning that they believe their overall prior condition is better and due to this they prioritize care of men with said pathologies.

Discussion and Conclusions

Although the incidence of CI is declining in developed countries, progressive ageing of the population and immigration mean that the absolute number of coronary episodes and, therefore, the prevalence of CI will not diminish or will even increase in the near future.

The analysis of patients affected by CI permits us to discover that the differences detected in the action generated by them do not depend on a possible difference in the perception of the process as is presented in other studies [26,27]. The bigger delay in the request for medical help produced by women, evident in other studies [8-10] and generated consciously is not due to a lack of knowledge about the pathology or an incorrect perception of the seriousness of the process, but because they feel restricted by socio-cultural factors such as family and domestic responsibilities as well as because of psycho-emotional aspects, such as not wishing to become a burden for their family and friends [11,27].

This highly relevant aspect should be analyzed more deeply. Boosting society's knowledge of it to be able to generate preventative measures which favor the earlier arrival of the health services and medical attention would permit early treatment and improved evolution of these pathologies.

In addition to the delay generated by women, which acts against them due to the greater evolution of the process [9,10,15], there is that generated by the actions of doctors. Health professionals show a lack of awareness of this action detected in women, as well as having a totally opposite perception and believing that women look after their health more than men, so they prioritize a more immediate and aggressive action in men and generate a less invasive action in women, undermining the recovery process of women and their final evolution.

As for the difference in the professional experience in the knowledge of these pathologies and their treatment and action

according to sex, it shows us the existence of a real difference and a perceptible bias in daily practice. Clearly CI has greater comorbidity in men but within the ranges in which our society moves (main cause of death for both sexes) it is a disease which is very well known and treated in both sexes.

The presence of mistaken exteriorized ideas in the interviews carried out with doctors –such as the belief of a higher emotional level or histrionism of women affected with these pathologies– clearly demonstrates that, today, there remains a great deal of work ahead of us, with new studies being necessary from a gender perspective to be able to bring knowledge and the actions of health professionals up to the required standard regarding CI for men and women.

This shows that currently we are still before an erroneous vision of health and illness in women and that this still causes a biased attitude in their treatment.

We can conclude that the factors related to this inequality in treatment are the lack of professional experience in doctors in the treatment of women, the gender condition of women itself, both due to biological and psycho-social factors, and the evolution of the process, conditioned as well by the action of the patient and that of health professionals.

Ultimately, the differences in the action carried out by doctors for men and women affected by CI, together with the difference in actions of the patients themselves according to their sex, generate a gender inequality which harms the evolution of women with these pathologies.

References

1. Banegas JR, Villar F, Graciani A, Rodríguez-Artejo F (2006) Epidemiología de las enfermedades cardiovasculares en España. *Revista Española de Cardiología* 6: 3-12.
2. Ferreira-González I (2014) The epidemiology of coronary heart disease. *Rev Esp Cardiol (Engl Ed)* 67: 139-144.
3. Barrabés JA (2013) Retos Actuales en el diagnóstico y manejo del SCA en España. *Sociedad Española de cardiología*.
4. Borrell C, Vives-Cases C, Domínguez-Berjón MF, Álvarez-Dardet C (2015) Gender inequalities in science: *Gaceta Sanitaria* takes a step forward. *Gac Sanit* 29: 161-163.
5. Ruíz MT, Vives C, Papi N, LaParra D (2005) Indicadores para medir los determinantes de las desigualdades en salud desde la perspectiva del análisis de género. *Alicante: Universidad de Alicante. Departamento de Salud Pública. Área de Medicina Preventiva y Salud Pública*.
6. Lawesson SS, Alfredsson J, Fredrikson M, Swahn E (2012) A gender perspective on short and long term mortality in ST-elevation myocardial infarction. *A report from the SWEDEHEART register. International Journal of Cardiology* 17: 403-409.
7. Marrugat J, Sala J, Aboal J (2006) Epidemiology of cardiovascular disease in women. *Rev Esp Cardiol* 59: 264-274.
8. Carbajosa J, Llorens P, Diéguez S, Carratalá JM, Damaso JD, et al. (2011) Influencia del sexo del paciente en el manejo del síndrome coronario agudo con elevación del ST en los servicios de urgencias. *Emergencias* 23: 82-92.
9. Riesgo A, Miró O, López-de-Sá E, Sánchez M (2011) Comparison of the management of non-ST segment elevation myocardial infarction during emergency care according to sex of the patient. *Rev Esp Cardiol* 64: 1060-1064.
10. Ferraz-Torres M, Belzunegui-Otano T, Marín-Fernandez B, Martínez-García O (2014) Diferencias según sexo en el tratamiento y la evolución de los pacientes afectos de síndrome coronario agudo en Navarra. *Anales del sistema sanitario de Navarra* 37: 247-253.
11. Rohlfs I, del Mar García M, Gavalda L, Medrano MJ, Juvinyà D, et al. (2004) Gender and ischemic heart disease. *Gac Sanit* 18 Suppl 2: 55-64.
12. (2010) Ministerio de sanidad, política social e igualdad. Plan de calidad para el sistema nacional de salud.
13. Ferraz-Torres M, Belzunegui-Otano T, Marín-Fernandez B, Martínez-García O, Azcona-Ciriza L (2014) Percepción y actuación de los pacientes con patología coronaria aguda en la fase prehospitalaria. *Metas de enfermería* 17: 6-11.
14. Conthe P, Lobos JM, González-Juanatey JR, Gil A, Pajuelo J (2003) Diferencias en la atención de las mujeres con alto riesgo cardiovascular respecto a los varones: estudio multidisciplinar. *Medicina Clínica* 120: 451-455.
15. Aldasoro E, Calvo M, Esnaola S, Hurtado de Saracho I, Alonso E, et al. (2007) Gender differences in early reperfusion treatment after myocardial infarction. *Med Clin (Barc)* 128: 81-85.
16. Barros M, Fusaro L, Coria N, Duronto EA, Beck E (2013) Las mujeres con síndrome coronario agudo reciben menos intervenciones en la fase aguda que los hombres en una población argentina. *Revista Argentina de Cardiología* 81: 316-321.
17. Bolívar J, Martínez R, Mateo I, Torres JM (2013) Actuación de los pacientes ante un síndrome coronario agudo: diferencias desde una perspectiva de género. *Emergencias* 25: 23-30.
18. Ferraz-Torres M, Belzunegui-Otano T, Marín-Fernandez B, Martínez-García O (2015) Differences in the treatment and evolution of acute coronary syndromes according to gender: what are the causes? *Journal of Clinical Nursing* 24: 2468-2477.
19. Alconero Camarero AR, San José Garagarza JM, Muñoz Cacho P, Cobo Sánchez JL (2009) Gender differences in the hospitalization and reperfusion delays in the acute coronary syndrome. *Enferm Intensiva* 20: 44-49.
20. Aguilar S, Patel M, Castillo E, Patel E (2012) Gender Differences in Scene Time, Transport Time, and Total Scene to Hospital Arrival Time Determined by the Use of a Prehospital Electrocardiogram in Patients with Complaint of Chest pain. *The Journal of Emergency Medicine* 43: 291-297.
21. Riesgo A, Bragulat E, López-Barbeito B, Sánchez M, Miró Ó (2008) Aproximación diagnóstica al dolor torácico en urgencias: ¿existen diferencias entre mujeres y hombres?. *Emergencias* 20: 399-404.
22. Mingo S, Goicolea J, Nombela L, Sufate E, Blasco A, et al. (2009) Primary percutaneous angioplasty. An analysis of reperfusion delays, their determining factors and their prognostic implications. *Rev Esp Cardiol* 62: 15-22.
23. Claessen BE, Chieffo A, Dangas GD, Godino C (2012) Gender differences in long-term clinical outcomes after percutaneous coronary intervention of chronic total occlusions. *Journal of Invasive Cardiology* 24: 484-488.
24. Lambrew C, Bowly L, Rogers W, Chandra NC, Weaver WD (1997) Factors influencing the time to thrombolysis in acute myocardial infarction. Time to thrombolysis substudy of the national registry of myocardial infarction. *Archives of Internal Medicine* 157: 2577-2582.
25. Leizorovicz A, Haugh MC, Mercier C, Boissel JP (1997) Pre-Hospital and hospital time delays in thrombolytic treatment in patients with suspected acute myocardial infarction. Analysis of data from the EMIP study. *European Myocardial Infarction Project. European Heart Journal* 18: 248-331.
26. Sheifer SE, Rathore SS, Gersh BJ, Weinfurt KP, Oetgen WJ (2000) Time to presentation with acute myocardial infarction in the elderly: associations with race, sex, and socioeconomic characteristics. *Circulation* 102: 1651-1656.
27. Martin R, Johnsen EL, Bunde J, Bellman SB (2005) Gender differences in patients attributions for myocardial infarction: Implications for adaptive health behaviors. *International journal of Behavioral medicine* 12: 39-45.