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Influence of Gender Determinants on Informal Care and Health Service Utilization in Spain: Ten Years after the Approval of the Equality Law

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Abstract: The existence of gender inequalities in health, in the use of health services, and in the development of informal care has been demonstrated throughout scientific literature. In Spain, a law was passed in 2007 to promote effective equality between men and women. Despite this, different studies have shown that the previous gender inequalities are still present in Spanish society. For all these reasons, the objective of this paper is to study the differences by sex in informal care and in the use of emergency care, and to identify the existence of gender inequalities in Spain 10 years after the adoption of the aforementioned equality law. In this case, we development a cross-sectional study based on the 2017 Spanish National Health Survey of the Spanish population aged 16 and over. To analyze the influence of gender determinants on informal care and emergency care utilization, logistic regressions were performed, model 1 was adjusted for age, and model 2 was further adjusted too by the variables of the Andersen care demand model. The results showed that informal care and the use of the emergency care continues to be higher in women than in men. Informal care in women was related to a higher level of education. In emergency care, the older the age, the lower the probability of utilization, and living in a rural municipality was related to a higher probability of utilization for both sexes. Finally, we concluded that there is still a need for studies that analyze gender inequalities in different contexts, such as the informal care and the use of health services. This is especially relevant in Spain, where economic changes have led to a change in roles, mainly for women, and new management strategies are needed to achieve equity in care and effective equality between men and women.

Keywords: inequalities; health care services; gender; emergency services; informal care

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1. Introduction

Inequalities in health are related to the different opportunities and resources that people have, in relation to politics, economics, and access to health (Peter and Evans 2001). Along with the study of health inequalities, the study of gender inequalities in health has gained increasing interest because of the increased social and economic relevance of women and growing demands for full gender equality (Garrido 2011). According to the World Health Organization (WHO), gender inequity in health is related to differences in health risks, health needs, and access to health services, coupled with gender differences in health responsibilities and power (Rohlfs et al. 2000).

Several studies have hypothesized whether the difference in health care between men and women is related to gender roles (Saez et al. 2019). This would reduce and/or eliminate certain manifestations of pain, discomfort, or illness itself in men, and in women they would appear to show the role of the sick (Kuhlmann and Annandale 2012; Oksuzyan et al. 2019). It has been observed that women between the ages of 18 and 50 years are more

likely to attend health services, an age period in which gender roles are more pronounced (Meininger 1986).

The time available to go to the doctor's surgery has been seen to be an important factor to consider in access to health services (Batthyány 2007). Traditionally, it has been said that women who did not have paid work outside the home had more time available to go to the doctor's surgery, and those who did have paid work outside the home had less time available, as the latter also worked a "double working day" (García-Calvente et al. 2004). However, other studies justify a lower use of health services by women who have paid work outside the home due to their better perception of their health and therefore less need for health care (Fernandez et al. 1999). Finally, the role of career sometimes results in women accessing the health service for reasons related to another family member (Aguilar-Palacio et al. 2018; Rohlfs et al. 1997). Recent studies continue to show that being a woman is related to a greater burden of care for dependent persons, even more so for those without education or in a situation of vulnerability (Fernández et al. 2019). It has also been shown that women living in rural areas have more difficulty in accessing care resources, and that they are also women with a marked gender role due to the pressure and social control exerted by their environment (Zoido Naranjo and Pérez 2003).

In order to achieve equitable health care and guarantee the provisions of article 27 of Organic Law 3/2007 for effective equality between men and women, it is necessary to continue research into gender inequalities in health and access to health care services. Currently, the integration of a gender perspective in health programs is being promoted (Gil-Borrelli et al. 2017; 2018; Mas-Pons et al. 2018; Puig-Barrachina et al. 2019). It is important that the development of these health programs consider the impact of gender roles, norms, and health inequalities.

2. Literature Review

The study of health inequalities is not new. Since the 1990s, much research has been carried out to analyze inequalities in health status and the use of health services in the population. Health inequalities are rooted in the political, economic, and social inequalities already existing in society itself. It is related to the different opportunities and resources that people have in relation to access to health (Peter and Evans 2001). Alongside the study of health inequalities, the analysis of the gender perspective in health has gained increasing interest as a consequence of the increased social and economic relevance of women and the growing demands for full gender equality (Garrido 2011).

Numerous authors have tried to define the concept of gender bias in health care (Lenhart 1993). The most consistent definition is one that understands such bias as the erroneous approach to equality or differences between men and women, in their nature, behavior and/or reasoning, which can lead to unequal behavior in health services and research, and which is discriminatory to one sex over the other (Domingo-Salvany et al. 2016; Ruiz Cantero et al. 2006, 2011).

According to the World Health Organization (WHO), the gender perspective in health involves integrating the inequalities of power and work between men and women, taking into account their epidemiological profiles, since these inequalities are the basis of the differences in health between men and women. Therefore, gender inequity in health would result in three types of imbalances:

- Differences between health risks, part of these differences related to women's reproductive role, and between opportunities to enjoy good levels of health (women generally have less access to nutrition, education, employment, and income).
- Differences in relation to health needs and access to health services.
- Different responsibilities and power differentials in the health sector.

2.1. Health Problems and Health Behaviors

Women and men do not get sick in the same way. This calls for differentiated prevention, treatment, and care strategies. It is known that there are more frequent health

problems in women, including the fact that women, although they live longer, do so in poorer health. According to data provided by the Spanish National Institute of Statistics (Ministerio de Sanidad 2016), women are more likely to suffer from health problems than men, women suffer from chronic diseases earlier than men, and also experience poorer general health. The expected number of years (at birth) without chronic disease is 26.2 years for women and 31.3 years for men. In perceived good health, women live 53.4 years and men 57.3 years (Ministerio de Sanidad 2016). The data on the presence of poor self-perceived health, chronic illness and limitation of physical activity confirms this reality, since in 2017 (latest National Health Survey published in Spain), for example, 55.1% of men had a chronic illness compared to 64.3% of women; in terms of self-perceived health, 24.9% of men reported being in fair, poor or very poor health compared to 33% of women. This is similar in the vast majority of European countries (Bambra et al. 2009).

In fact, the study of gender inequalities in health has a long history. Studies such as those by Aguilar et al. (Aguilar et al. 2002) showed that women have more severe coronary symptoms than men. Revascularization after acute myocardial infarction in women tends to be more complicated because their arteries tend to be narrower. In 2006, the European Society of Cardiology published a report showing that more women die from coronary heart disease, stroke, and other cardiovascular diseases (56% of women versus 43%). Other research has pointed to delayed diagnosis of coronary heart disease as a cause of higher mortality in women than in men (Stramba-Badiale et al. 2006). Another significant disease is Chronic Obstructive Pulmonary Disease (COPD), whose impact on women's health has been little studied, despite the fact that it is a disease with a high prevalence worldwide and a high mortality and morbidity rate (Machón et al. 2010). An important study on the medical management of patients with respiratory diseases, concluding that it was necessary to conduct prospective studies, as retrospective studies excluded women, reflecting under-diagnosis, leading to a gender bias in the diagnostic process (Edwards et al. 2003).

However, in terms of lifestyles, men tend to have more unfavorable health behaviors than women, which is in line with the above-mentioned health outcomes. Some authors, such as Urbanos et al., justify these differences as being due to the greater weight of social determinants on health as opposed to lifestyles (Urbanos-Garrido 2001, 2016). Gender mainstreaming in health programs does not imply the implementation of differentiated programs, it means creating effective programs that respond to the different needs of women and men, benefiting both women and men. It is important that the development of health programs take into account the impact of gender roles, norms, and inequalities in health in order to strive for equitable health.

2.2. Health Services

Health service utilization is defined as access to the following health services (Birch et al. 1993). Numerous investigations have been carried out to demonstrate the existence of inequalities that both women and men receive from the health system (Aguilar-Palacio et al. 2018; Sánchez-Recio et al. 2020, 2021).

Much research has also been done on the use of health services. In 2004, Ruiz and Verdú, in their study on "Gender bias in therapeutic effort", concluded that men made greater use of these systems than women (Ruiz-Cantero and Verdú-Delgado 2004). Already in the 1980s, it was observed that men had greater access to more developed technologies than women for the same needs. These data were later confirmed by an analysis carried out in Catalonia (1990s), where, excluding admissions for childbirth, caesarean section, and complications during childbirth, hospital admissions were higher for men than for women.

On the other hand, many studies have tried to justify this difference or inequality in the use of health services between men and women. It is generally stated that women use more health services than men, with some differences in the trend when analyzed by age group and social class (Artazcoz et al. 2016). Historically, health service utilization has been shown to increase with age. However, recent studies by Aguilar-Palacio et al. in Spain

during the period 2006–2012 show that utilization has decreased with age (Aguilar-Palacio et al. 2016), mainly in the case of primary care (PC) and specialized care (SC).

Women have been found to use more pre-emptive services, mainly related to a greater awareness of self-care. Studies by various authors have hypothesized whether the difference in the use of health services by men and women is related to the existence of gender roles. Such roles would reduce or even eliminate certain manifestations, such as pain, discomfort or illness in men, and in the case of women, they would appear to show the role of the sick (Gove 1984; Kandrack et al. 1991; Verbrugge 1985). For the author Meininger, the highest utilization of health services in women occurs in women between 18 and 50 years of age, an age period in which gender roles are more characterized (Meininger 1986).

The time available to go to the doctor's office has been found to be an important factor to take into account in the case of both men and women. Traditionally, it has been said that women who did not have a paid job outside the home (housewives) had more time to go to the doctor's office, and those who did work outside the home, who worked a so-called "double working day", had less time (Fernández et al. 2000). However, other studies justify the lower use of health services by women who have a paid job outside the home because of their better perception of their health and, therefore, have less need for health care (Aguilar-Palacio et al. 2015; Sánchez-Recio et al. 2020). On the other hand, it has also been observed that in the role of informal care, women sometimes consult a medical professional for another family member (Puig-Barrachina et al. 2019).

The study of the factors that condition people's health is complex, due to their great variety and complexity. The WHO Commission on Social Determinants of Health has recently concluded that the socio-economic, cultural, and environmental determinants in which a person lives have a greater influence on health than biological or health care determinants. The opportunities that people have throughout their lives will not only be related to genetic inheritance and lifestyles, but also to access to basic resources such as education, food, access to the labor market, working conditions, social networks, housing, etc. (Marmot et al. 2008).

For this reason, the study of the use of health services from a gender perspective, it is necessary to take into account the employment situation of women in Spain, since they continue to play the role of the main caregiver, assuming the burden of the so-called "double working day" (Aguilar-Palacio et al. 2018). There is controversy about the effect of this double working day on women's health. For several authors, this "double working day" has a negative influence on women's health; while for others, it is beneficial to their health (Artazcoz et al. 2016; Campos-Serna et al. 2012; Puig-Barrachina et al. 2019).

The approval in Spain of Organic Law 3/2007, of 22 March, for the effective equality of men and women, marks a turning point in the promotion of health-related measures to foster such equality (vertical and horizontal equity). Article 27 establishes the principle of equality in health policy and the principle of equal treatment between men and women, avoiding discrimination between men and women due to biological differences or associated social stereotypes. Many studies have been carried out to analyze social inequalities in health, and in particular gender inequalities (Sánchez-Recio et al. 2021; Sarría-Santamera et al. 2015). It is important to continue to investigate how social determinants continue to influence health and how gender roles continue to place women in a vulnerable position in relation to health.

2.3. Objective

The aim of this study is to analyze the relationship between gender roles in informal caregiving and health service utilization. Specifically, the utilization of the emergency service in the last 4 weeks in the population aged 16 years or older in Spain in 2017. This research is relevant given the scarcity of similar up-to-date work. In addition, it will allow us to detect possible areas of intervention to achieve equity in the use of health services between men and women. Based on our review of the literature, the following hypotheses were formulated in accordance with the study's general aims:

Hypothesis 1. *Differences will be observed between men and women in relation to use of health care services, with greater use by women.*

Hypothesis 2. *Even today, and ten years after the passing of an equality law in Spain, informal care will continue to be the main form of care in Spain.*

Hypothesis 3. *Social inequalities will be observed both in the use of emergencies care services and in the development of informal care.*

Hypothesis 4. *Age will be inversely related to emergency health service utilization, but directly related to the development of informal care.*

3. Methodology

We used cross-sectional study design. Data were obtained from Spanish National Health Surveys (NSH) conducted in 2017 with a stratified multistage design. They are performed in non-institutionalized populations more than 15 years old through personal interview. Seasonal effect was avoided by including fall months in the sample collection.

Health surveys provide periodic information on population health, the determinants that condition it and its influence on the use of health care services. Health surveys are a fundamental instrument for public health research and the planning and evaluation of health policies, being a widely used source of data. In the scientific literature, we can find numerous studies that have analyzed through health surveys (Abásolo Alessón et al. 2008; Urbanos-Garrido and López-Valcarcel 2013), the use of different health services (Aguilar-Palacio et al. 2018; Aguilar-Palacio et al. 2015), as well as their use by different groups and their relationship with health determinants, especially in the study of social inequalities in the use of health services (Abasolo et al. 2001; Sánchez-Recio et al. 2020).

These surveys are conducted nationally by the National Statistics Institute (Instituto Nacional de Estadística, INE) in collaboration with the Ministry of Health. They are aimed at all persons residing in main family dwellings. When the same dwelling is made up of two or more households, each household must be considered independently. All surveys guarantee their representativeness on a national level. Specifically, these surveys include three questionnaires: adult, which is carried out on the non-institutionalized adult population, children and the household, thus providing a wide variety of indicators that facilitate the study of health determinants in both the child and adult populations (Ministerio de Sanidad Consumo y Bienestar Social 2017; Ministerio de Sanidad Servicios Sociales e Igualdad MSSSI).

The adult and household questionnaires were taken into account for this study. To correct for possible sampling errors, the surveys provide weighting factors that will be used in this study. The information from these interviews was obtained through personal interviews (Borrell and Rodríguez-Sanz 2008). More information on the National Health Surveys can be found in the references section (Ministerio de Sanidad Consumo y Bienestar Social 2017).

The same methodology was applied across the period, allowing comparability among surveys. In this case, sample size was 22,903 subjects. Finally, it should be noted that the Ministry of Health, Social Services, and Equality publishes the data in an anonymized form for use by researchers, so it was not necessary to request informed consent or the approval of any Ethics Committee to carry out this study.

3.1. Setting

Spain has a universal health care system. Administratively, Spain is subdivided into 17 Autonomous Communities, each of which has its own autonomously organized health system. Despite this autonomous organization, each Autonomous Health System must comply with the provisions of the General Health Act of 1986 (Boletín Oficial del Estado 1986) and Royal Decree 1030/2006 (Boletín Oficial del Estado 2006) on the Minimum Services Portfolio of the National Health System. Based on these minimums, each health sub-system can improve the services it provides to its citizens (Florido Alba et al. 2019).

Organizationally, these health systems are all organized into two levels of care, primary care, understood as the user's access to the Health System, which he/she accesses by self-demand, and specialized care, which the user accesses by referral from extra- and intra-hospital emergencies, and by referral from the primary care doctor. Finally, and within specialized care, there is hospital care, which the user accesses either by referral from the emergency department or by referral from the specialized care doctor. Access to emergency services by the user can also be by two routes, either by self-referral or by referral from the primary care physician or a specialist in specialized care.

3.2. Variables

To analyze the relationship into informal care and the use of emergency care we take into account three sets of measurement: (i) outcome variables, (ii) independents variables, and (iii) adjustment variables (Table 1 showed the definition of the variables used in this study).

(i) Outcome variables: we selected two outcome measurements: informal care and use of emergency care. Informal care was obtained in the survey through the question: "Care for the elderly or someone who has a chronic disease (yes/no)". The use of emergency care was obtained in the survey through the question: "Emergency care utilization in the last 12 months (yes or no)".

In this study, the definition of informal caregiver has been based on the definition given by (Feldberg et al. 2011) and (Pérez 2006) "that person primarily responsible for the non-professional care of the patient. He/she resides the vast majority of them live in the same home as the patient must always be available to meet the patient's and does not receive any financial remuneration for his or her for the role, he/she performs".

(ii) Independent variables: in order to determine gender roles on informal care and use of emergency care, we used the following individual measurement: age, educational level, working status, unmet health needs, residence township, number of times used emergency care in the last twelve months, and hours per week dedicated to dependent person care. These measurements are commonly used to analyze gender inequalities in both health and health service utilization (Escuela Andaluza de Salud Pública 2013):

Table 1. Definition of the variables used in the study.

	Name of Variable	Question Used in Health Surveys	Answers
Outcome variables			
	Informal Care	Care for elderly or someone who has a chronic disease, At least once a week	1. Yes, 2. No. 3. Does not know, no contest
	Use of Emergency care	Emergency department use in the last twelve months	1. Yes, 2. No.
Independents variables			
	Age	Age of respondents	Continuous variable
	Educational Level [1]	Educational level	1. Not applicable, under 10 years of age, 2. Cannot read or write, 3. Incomplete primary education (Attended less than 5 years of school), 4. Completed primary education, 5. First stage of Secondary Education, with or without diploma (2nd ESO, EGB, Bachillerato Elemental). 6. High School Studies, 7. Intermediate vocational education and training or equivalent, 8. Advanced vocational education and training or equivalent, 9. University studies or equivalent
	Working Status [2]	Current economic activity	1. Working, 2. Unemployed, 3. Studying, 4. Retired, 5. Pensioner, 6. Unpaid household labor
	Unmet Health Need [3]	Lack of medical care in the last 12 months due to financial or transport problems.	Yes/no
	Residence Township [4]	Size of municipality of residence	1. Less than 5000 2. 5000 to 10,000 3. More than 10,000 inhabitants
	Number of times using emergency care in the last twelve months		Continuous variable
	Hours per week dedicated to dependent person care.		Continuous variable

Table 1. *Cont.*

	Name of Variable	Question Used in Health Surveys	Answers
Adjustment variables: Variables of Andersen Model of Demand for Care: Variables of Contextual dimensions: D21:D26	Type of health coverage [5]		Universal
Variables of individual dimensions:	Marital Status [6]	Marital Status	1. Single, 2. Married, 3. Widowed, 4. Divorced, 5. Separated, 6. Does not know, no contest
Factors facilitating access and use of health services.	Public or private insurance [7]	Health insurance modality	1. Public, 2. State mutualists with public insurance, 3. State mutualists with private insurance, 4. Persons with private insurance only, 5. Persons who pay when they receive health care.
Factor of need.	Chronic disease [8]	Have you been diagnosed with a chronic disease?	Yes/no.
	Self-rated health	How would you say your health has been over the last twelve months?	1. Very good, 2. good, 3. Regular, 4. Bad, 5. Very Bad
	Current smoker [9]	Do you currently smoke?	1. Yes, I smoke daily, 2. Yes, but I do not smoke every day, 3. I do not currently smoke, but I have smoked before, 4. I do not smoke and have not smoked regularly before. 5. Does not know, no answer

[1] Variable recoded from the International Standard Classification of Education (ISCED) and subsequently grouped into one variable with three categories. [2] Variable recoded from the classification of social class proposed by the Working Group on Determinants of the Spanish Society of Epidemiology, where the social class is assigned according to occupation, based on the National Classification of Occupations 2011, and subsequently classified into 2 categories. [3] Variable recoded from the questions asking about unmet health needs in terms of transport or economic problems, with category 1 being yes if they report having some unmet need and 0 if they have no unmet health needs. [4] Variable recoded into two categories, population under 10,000 inhabitants and population over 10,000 inhabitants. [5] The Spanish health system has a model of universal coverage for all people, whether or not they have a health card or pay social security contributions. [6] Variable in which the categories divorced and separated and reclassified within the same category, leaving as options, married, separated/divorced, single, widowed. [7] Variable recoded into two categories, public insurance, and private insurance. [8] Chronic illness is defined as an illness lasting more than 6 months. [9] Variable recoded into two categories, smoker, all those who reported smoking daily or occasionally, and non-smoker the rest of the categories.

- Age: in order to capture gender roles according to the age of the respondents, age was included through five age intervals (15–24 years, 25–44, 45–64, 65–79, and 80 and over).
- Educational level: educational level was classified into three categories according to the International Standard Classification of Education (ISCED) (UNESCO 2011): low (people with or without primary education: ISCED 0–1), medium (secondary education: ISCED 2–4), and high (higher education and university studies, ISCED 5–6).
- In this case, educational level was selected as a proxy of indicator of socioeconomic position, given that it is attained relatively early in life and it is stable over the adult life span (SEE Sociedad Española de Epidemiología; Comisión para Reducir las Desigualdades Sociales en Salud en España 2010). Most studies confirm a significant link between education and health behavior (Aguilar-Palacio et al. 2015).
- Working status: in this case, working status was obtained through the profession that surveyed person performed in his/her last job, and was classified into five categories: workers (paid work), unemployed, students, pensioners (retired persons and those who receive some kind of pension), and unpaid household labor.
- Unmet Health needs: in order to take into account unmet health needs, the following questions from the accounts were taken into account: "lack of medical assistance due to waiting list, transportation problems and economic problems (yes or not)". To this end, a new variable was created in which those who reported a lack of medical care related to the above-mentioned causes were coded as "yes" unmet health need, and the rest of the responses as "not" unmet need.
- Residence Township: the residence township was classified in two categories, rural (<10.000 inhabitants) and urban (>10.000 inhabitants).
- Number of times using emergency care in the last twelve months.
- Hours per week dedicated to dependent person care.

(iii) Adjustment measurement: we used the variables of Andersen Model of Demand for care (Andersen 1995, 2008). This model classifies the determinants of health service use in two dimensions: (a) contextual: it includes variables related to the contextual characteristics of the environment, where we consider the country's health care model (universal coverage system): (b) individual, where we differentiate predisposing factors (age, sex, employment status, level of education and marital status), factors facilitating access and use of health services, where we consider the individual's health insurance model (public or private insurance) and factors of need, where we consider the presence of a chronic disease. Within the health behaviors, we took into account whether or not the person consumed tobacco daily, and finally, in the section on health outcomes, we took into account the self-rated health of the person.

3.3. Analysis

The statistical analyses were carried out in different phases: initially, a simple description of the sample was made. Then, the prevalence of dependent variables, use of emergency health care, and informal care standardized by age (reference year 2017), and by age group, were calculated. Finally, in order to study gender roles in both informal care and in the use of emergency health care, logistic regressions were performed. Odds ratios (OR) and their confidence intervals (CI 95%) were calculated. Differential analyses were performed for the two dependent variables (informal care and use of emergency care). In the case of use of emergency care, we also included as an independent the informal care variable to see the role this variable played in the use of the health service. In both cases, several models were run (Table 2). In the first model, only the independent variables were included. The second model also adjusted for the variables included in the Andersen Care Demand Model. We calculated the C statistic (area under the curve COR) to determine the predictive capacity of the models, where a value close to 0.5 would indicate a low predictive capacity.

Table 2. Description of the variables included in the logistic regression models conducted to analyze the gender determinants of emergency health service utilization and informal care.

	Variables		Use of Emergency Care		Informal Care	
			Model 1	**Model 2**	**Model 1**	**Model 2**
Independent Variables	Age	15–24 years	Ref.	Ref.	Ref.	Ref.
		25–44 years	x	x	x	x
		45–64 years	x	x	x	x
		65–79 years	x	x	x	x
		≥80 years	x	x	x	x
	Educational level	Low	x	x	x	x
		Medium	x	x	x	x
		High	Ref.	Ref.	Ref.	Ref.
	Work status	Workers	Ref.	Ref.	Ref.	Ref.
		Unemployed	x	x	x	x
		Students	x	x	x	x
		Pensioners	x	x	x	x
		Unpaid household labor	x	x	x	x
	Unmet health need	Yes	x	x	x	x
		No	Ref.	Ref.	Ref.	Ref.
	Residence Township	<10,000 inhabitants	x	x	x	x
		>10,000 inhabitants	Ref.	Ref.	Ref.	Ref.
	Number of times using emergency care in the last twelve months (M; St)*			x		x
	Hours per week dedicated to dependent person care (M, St)*			x		x
Adjustment variables	Marital Status	Married		Ref.		Ref.
		Single		x		x
		Divorced/separated		x		x
		Widower		x		x
	Self-rated health	Good		Ref.		Ref.
		Bad		x		x
	Chronic Disease	Yes		x		x
		No		Ref.		Ref.
	Current smoker	Yes		x		x
		No		Ref.		Ref.
	Health Insurance	Public		x		x
		Private		Ref.		Ref.

Ref.: reference category. Only Odds Ratios and CI 95% are presented in the results tables for the variables of interest related to gender determinants in the use of health emergency services and informal care (independent variables). The rest of the variables will not be shown in the results tables, as they are adjustment variables in the models.

4. Results

4.1. Description of the Sample Selected for the Study

Sample size was 23,089 201 subjects. Table 3 shows the main sample characteristics. In relation to outcome measurement, we observed that a higher proportion of women than men devoted more time to informal care (gender gap 3.18%), and that women spent on average 2.14 h per week to informal care compared to 1.97 h for men ($p < 0.001$). Women also used the emergency health service more than men. Specifically, women used this service 1.74 ($p < 0.001$) times more than men per year. The most prevalent age group for both men and women was 45–64 years, followed by 25–44 years. 47% of men and 41% of women had a medium educational level. In relation to work status, men continued to have a higher proportion of workers than women (gender gap 10.76; $p < 0.001$). Likewise, 15.18% of women reported that they were engaged in unpaid household labor in front of 2.36% of men. Women had higher unmet health needs than men (gender gap 4.72%; $p < 0.001$). Finally, about 37% of the sample lived in a municipality of less than 10,000 inhabitants.

Table 3. Sample Description.

			Men (%; CI 95%)	Women (%; CI 95%)	*p* Chi^2
Outcome Variables	Informal care	Yes	9.51 (8.94–10.08)	12.69 (12.09–13.31)	<0.001
		No	90.49 (89.91–91.05)	87.31 (86.68–87.90)	
	Use of emergency health care	Yes	31.82 (30.98–32.68)	27.06 (26.21–27.93)	<0.001
		No	72.93 (72.06–73.79)	68.17 (67.31–69.01)	
Independent Variables	Age	15–24 years	6.69 (6.22–7.21)	5.69 (5.28–6.13)	<0.001
		25–44 years	28.62 (27.74–28.37)	27.54 (26.74–28.37)	
		45–64 years	37.19 (36.25–38.13)	33.97 (33.12–34.84)	
		65–79 years	20.04 (19.27–20.83)	20.62 (19,89–21.36)	
		≥80 years	7.43 (6.94–7.96)	12.15 (11.57–12.76)	
	Educational level	Low	26.22 (25.37–27.08)	26.71 (25.91–27.62)	<0.001
		Medium	46.18 (45.21–47.15)	40.28 (39.39–41.18)	
		High	27.59 (26.73–28.47)	33.01 (32.15–33.86)	
	Work status	Workers	50.12 (49.15–51.10)	39.36 (38.47–40.25)	<0.001
		Unemployed	34.15 (33.24–35.08)	30.06 (29.24–30.91)	
		Students	10.48 (9.90–11.09)	10.86 (10.31–11.44	
		Pensioners	4.99 (4.58–5.43)	4.52 (4.16–4.91)	
		Unpaid household labor	2.36 (1.58–3.53)	15.18 (14.54–15.85)	
	Unmet health need	Yes	23.70 (22.88–24.54)	28.42 (27.61–29.24)	<0.001
		No	76.29 (75.45–77.11)	71.57 (70.75–72.59)	
	Residence Township	<10,000 inhabitants	36.93 (36.01–37.88)	33.87 (33.01–34.74)	<0.001
		>10,000 inhabitants	63.06 (62.11–63.99)	66.12 (65.25–66.98)	
			M; SD *	**M; SD ***	**p Test**
	Number of times using emergency care in the last twelve months (M; St) *		3.42 (1.82–5.01)	5.16 (3.33–7.01)	<0.001
	Hours per week dedicated to dependent person care (M, St) *		1.97 (1.91–2.03)	2.14 (2.10–2.19)	<0.001
Adjustment Variables	Marital Status	Married	60.65 (59.70–61.60)	50.91 (50.01–51.82)	<0.001
		Single	27.97 (27.11–28.86)	21.94 (21.20–22.71)	
		Divorced/separated	6.60 (6.13–7.10)	8.46 (7.97–8.98)	
		Widower	4.76 (4.36–5.19)	18.67 (17.97–19.39)	
	Self-rated health	Good	71.13 (70.24–72.01)	62.42 (61.53–63.30)	<0.001
		Bad	28.86 (27.99–29.75)	37.57 (36.69–38.46)	
	Chronical Disease	Yes	65. 79 (64.86–66.71)	72.95 (72.13–73.75)	<0.001
		No	34.20 (33.28–35.13)	27.05 (26.24–27.86)	
	Current smoker	Yes	27.41 (26.54)	20.62 (19.89–21.36)	<0.001
		No	72.59 (71.71–73.45)	79.37 (78.63–80.10)	
	Health Insurance	Public	96.97 (96.61–97.28)	97.45 (97.15–97.72)	0.030
		Private	3.02 (2.71–3.38)	2.54 (2.27–2.84)	

* M; SD: Mean; Standard Deviation.

4.2. Prevalence of Informal Care and Use of Emergency Care by Sex, Standardized by Age (Reference Year 2017) and by Age Group

In Table 4, we present the prevalence of informal care and use of emergency care in men and women by age, educational level, unmet health needs, and residence township in Spain during 2017. Weighted and age-standardized data (2017 reference year). In relation to care reporting by age group, we observed that for both men and women, the most prevalent age group was 45–64 years (men 57.42% vs. women 59.41%) followed by 25–44 years and 65–79 years, respectively.

Table 4. Prevalence of informal care and the use of emergency service care in men and women by age, educational level, unmet health needs and residence township, Spain 2017. Weighted and standardized results by 2017 population.

		Informal Care		Use of Emergency Care	
		Men (%; CI 95%)	Women (%; CI 95%)	Men (%; CI 95%)	Women (%; CI 95%)
Age	15–24 years	4.46 (3.32–5.96)	2.11 (1.48–2.98)	7.54 (6.61–8.59)	7.59 (6.77–8.49)
	25–44 years	18.79 (16.44–21.38)	18.83 (16.91–20.91)	30.76 (29.06–32.52)	28.57 (27.13–30.05)
	45–64 years	57.42 (54.27–60.51)	59.41 (56.88–61.89)	33.17 (31.43–34.96)	29.52 (28.06–31.01)
	65–79 years	14.95 (12.83–17.34)	15.49 (13.73–17.44)	19.28 (17.85–20.80)	19.71 (18.45–21.02)
	≥80 years	4.36 (3.23–5.85)	4.14 (3.23–5.29)	9.22 (8.19–10.36)	14.61 (13.51–15.79)
Educational level	Low	1.17 (1.02–1.35)	1.94 (1.75–2.14)	3.06 (2.83–3.31)	3.77 (3.53–4.02)
	Medium	2.27 (2.07–2.49)	3.02 (2.79–3.25)	6.12 (5.81–6.41)	3.01 (2.79–3.25)
	High	1.33 (1.18–1.51)	1.91 (1.74–2.09)	4.14 (3.84–4.46)	6.19 (5.84–6.57)
Work status	Workers	2.26 (2.06–2.47)	2.84 (2.63–3.06)	6.39 (6.07–6.73)	5.81 (5.51–6.11)
	Unemployed	1.55 (1.37–1.75)	1.45 (1.28–1.64)	4.71 (4.38–5.06)	5.13 (4.79–5.47)
	Students	0.81 (0.69–0.94)	0.98 (0.86–1.11)	1.47 (1.32–1.64)	2.01 (1.83–2.18)
	Pensioners	0.15 (0.11–0.21)	0.10 (0.07–0.14)	7.22 (6.34–8.22)	9.79 (8.81–10.88)
	Unpaid household labor	NR	14.82 (13.22–16.56)	NR	2.52 (2.31–2.75)
Unmet health need	Yes	1.94 (1.75–2.14)	2.42 (2.22–2.63)	2.42 (2.22–2.63)	6.27 (5.95–6.61)
Residence Township	<10,000 inhabitants	1.58 (1.46–1.76)	2.25 (2.05–2.46)	4.17 (3.89–4.46)	4.86 (4.56–5.15)
	>10,000 inhabitants	3.20 (2.96–3.46)	4.62 (4.34–4.91)	9.15 (8.74–9.58)	11.58 (11.13–12.04)

CI: Confidence Interval 95%. NR: not representative due to low sample size (n men unpaid household labor 2.36%).

In the case of emergency health service use by age group, the age groups that most reported using the service were the same as those that most reported engaging in informal care, i.e., the most prevalent age group was 45–64 years, followed by 25–44 years and 65–79 years. In both cases, in informal care and the use of health emergencies, when looking at prevalence by age group, no statistically significant differences were found between men and women ($p > 0.005$).

Analyzing the variables of interest (informal care and use of emergency care) according to the occupation of the respondent, we find that women engaged in unpaid housework were the most likely to report engaging in informal care alone (14.82%). In this study, we were not able to analyze the number of men engaged in housework due to their low representativeness. We also observed that both men and women workers were (after women engaged in unpaid housework) the most likely to report engaging in informal lone caregiving, and although there was not much difference between men and women (0.77 more women), these differences were statistically significant ($p < 0.005$).

In relation to the use of health emergency services, pensioners reported the highest self-reported use (men 7.22% vs. women 9.79%), and in this case, statistically significant differences ($p < 0.005$) were also found between men and women (women reported using health emergency services 2.57% more than men). After pensioners, workers followed by the unemployed were the occupational categories that reported the highest use of health care services. In informal care, and in the use of the emergency health service, women reported greater unmet health needs than men, with statistically significant differences ($p < 0.005$). Specifically, in the case of the use of health emergencies, women reported almost three times more unmet health needs than men (men unmet needs 2.42% vs. women 6.27%).

Finally, people living in a residence township with more than 10,000 inhabitants reported (both men and women) more informal care and greater use of emergency health services than people living in a residence township with less than 10,000 inhabitants, with statistically significant differences ($p < 0.005$). Moreover, in the case of the use of health emergencies care, people living in residence township with more than 10,000 inhabitants

reported more than twice the use of this care service than those living in residence township with less than 10,000 inhabitants.

4.3. Gender Determinants of Emergency Health Service Use and Informal Care

Table 5 shows the influence of socioeconomic (educational level, work status, and residence township) and health determinants (unmet health need) in the informal care and in the use of emergency care in Spain during 2017. Models 1 and 2 show the influence of socio-demographic and health needs variables on informal care and health emergency utilization. Model 1 has been adjusted for age and model 2, in addition to adjusting for age, has been adjusted for the variables of the Andersen care model. In this section, we only analyze the results of the two models because, as they are adjusted for all the variables that can influence the demand for care and the care of dependent persons, it is possible to observe in detail the influence of the variables of interest that interact in gender inequalities (socio-demographic and health needs).

In relation with informal care, men into 45–64 years (OR: 1.93; CI 95%: 1.21–3.11) had higher probability to reported engaging in informal care than all other age groups. Those with low educational level had lower probability to reported engaging informal care than those with medium and high educational level. In relation with work status, unemployed men (OR: 1.44; CI 95%: 1.17–1.78; $p < 0.001$) has higher probability to reported engaging informal care than the others work status categories.

With respect to women, those into 45–65 years old (OR: 4.54; CI 95%:2.71–7.63; $p < 0.001$) and 65–79 (OR: 2.13; CI 95%:1.23–3.71; $p < 0.001$) years old had lower probability to reported engaging in formal care. In particular, the age group into 65–79 years had twice the probability to engaging in informal care than the age group into 65–79 years old and four times more than the 15–24 years old age group. If we observed educational level, women with low studies had lower probability to engaging in formal care than women with medium and high educational level.

Unemployed women (OR: 1.26; CI 95%:1.05–1.51; $p < 0.005$) and those dedicated to unpaid household labor (OR: 1.24; CI 95%: 1.04–1.49; $p < 0.005$) referred more probability to engaging in formal care than the other work status categories (workers, students, and pensioners).

Finally, those women who lived in a municipality of less than 10,000 inhabitants (OR: 1.11: CI 95%:0.00–1.26; $p < 0.10$) and who reported having unmet health needs were more likely to report engaging in informal care than those who lived in municipalities of more than 10,000 inhabitants and did not report having unmet health needs.

For emergency care utilization (Table 5), in both men and women, we observed an indirect relationship into age and the use of emergency care, as we observed that the older the age, the lower the probability of using the emergency health service.

With respect to educational level mend with low (OR: 1.32; CI 95%:1.15–1.52; $p < 0.001$) and medium (OR: 1.08; CI 95%:0.97–1.21; $p < 0.10$) had more probability to use emergency care than men with high studies. Pensioners men had 1.12 (CI 95%: 0.95–1.32; $p < 0.10$) more probability to use emergency care than workers. In this case, the results were not statistically significant, but they were trend line, as they showed a $p < 0.10$.

Table 5. Odds ratios and their 95% confidence intervals of informal care and use of emergency care by age, educational level, work status, unmet health care need, and residence township, stratified by sex. Spain (2017).

		Informal Care				Use of Emergency Care			
		Men (OR; CI 95%)		Women (OR; CI 95%)		Men (OR; CI 95%)		Women (OR; CI 95%)	
		Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Age	15–24 years	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
	25–44 years	0.75 (0.47–1.21)	0.78 (0.48–1.25)	1.45 (0.87–2.42)	1.47 (0.88–2.47)	0.76 (0.58–1.01)	0.68 (0.53–0.88) **	0.73 (0.55–0.96) ***	0.57 (0.43–0.75) ***
	45–64 years	1.92 (1.22–3.04) ***	1.93 (1.21–3.11) ***	4.48 (2.70–7.44) ***	4.54 (2.71–7.63) ***	0.45 (0.34–0.59) ***	0.50 (0.38–0.65) ***	0.41 (0.30–0.54) ***	0.32 (0.24–0.42) ***
	65–79 years	0.85 (0.50–1.43)	0.89 (0.52–1.53)	1.99 (1.16–3.42) ***	2.13 (1.23–3.71) ***	0.43 (0.31–0.59) ***	0.49 (0.37–0.67) ***	0.40 (0.28–0.56) ***	0.29 (0.21–0.41) ***
	≥80 years	0.73 (0.40–1.31)	0.88 (0.47–1.63)	0.98 (0.54–1.78)	1.33 (0.72–2.44)	0.54 (0.38–0.78) ***	0.71 (0.52–0.97) ***	0.52 (0.36–0.76) ***	0.37 (0.26–0.52) ***
Educational level	Low	0.64 (0.52–0.79) ***	0.64 (0.52–0.79) ***	0.67 (0.56–0.81) ***	0.72 (0.60–0.88) ***	1.32 (1.15–1.52) ***	1.36 (1.19–1.55) ***	1.19 (1.04–1.38) **	1.08 (0.94–1.25) *
	Medium	0.87 (0.74–1.03)	0.88 (0.75–1.05)	0.93 (0.81–1.07)	0.96 (0.84–1.11)	1.11 (0.98–1.24) *	1.08 (0.97–1.21) *	1.06 (0.94–1.19) *	0.98 (0.87–1.09)
	High	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Work status	Workers	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
	Unemployed	1.49 (1.22–1.83) ***	1.44 (1.17–1.78) ***	1.25 (1.05–1.50) **	1.26 (1.05–1.51) **	0.92 (0.78–1.07)	1.14 (1.01–1.31) **	0.92 (0.78–1.08)	1.06 (0.92–1.23)
	Students	0.70 (0.40–1.31)	0.66 (0.37–1.17)	0.72 (0.41–1.29)	0.71 (0.39–1.27)	0.86 (0.63–1.18)	1.08 (0.81–1.43)	0.89 (0.65–1.22)	1.12 (0.83–1.49)
	Pensioners	1.26 (1.01–1.59) **	1.18 (0.94–1.49)	0.96 (0.78–1.18)	1.07 (0.88–1.32)	1.26 (1.06–1.50) **	1.12 (0.95–1.32) *	0.87 (0.73–1.05)	0.91 (0.77–1.08)
	Unpaid household labor	NR	NR	1.35 (1.14–1.61) ***	1.24 (1.04–1.49) **	NR.	0.85 (0.73–0.98)	NR.	0.76 (0.65–0.89) ***
Unmet health need	Yes	1.18 (1.02–1.38) **	1.13 (0.97–1.33)	1.37 (1.21–1.54)	1.32 (1.15–1.53)	1.88 (1,70–2.08) ***	1.99 (1.83–2.17) ***	1.51 (1.35–1.68) ***	1.57 (1.44–1.73) ***
Residence Township	<10,000 inhabitants	0.64 (0.52–0.79)	0.99 (0.85–1.14)	1.13 (1.01–1.26) **	1.11 (0.99–1.26) *	0.91 (0.82–0.99) ***	0.86 (0.79–0.94) ***	0.91 (0.82–0.99) ***	0.87 (0.80–0.95) ***
	>10,000 inhabitants	Ref.	REF.	Ref.	Ref.	Ref.	Ref.	Ref.	
	C Statistic [a]	0.644	0.656	0.688	0.699	0.595	0.613	0.662	0.683

Note. CI 95%: 95% confidence interval; NE: not evaluable (low number of subjects; OR: odds ratio; Ref.: reference category. *** $p < 0.001$; ** $p < 0.005$; * $p < 0.010$. [a] Area under the curve ROC. Model 1 crude model. Model 2 adjusted by age and by the variables of Andersen's model for care (self-rated health, chronic disease/disorder, marital status, current smoker, and health insurance model.

Finally, women with unmet health care need had twice the probability to use emergency care than men without unmet health care need. Those men living in residence township with less than 10,000 inhabitants (OR: 0.86; CI 95%: 0.79–0.94; < 0.001) had lower probability to use emergency care than those living in residence township with more than 10,000 inhabitants.

For women, only those with low studies (OR: 1.08, CI 95%:0.94–1.25; $p < 0.10$) had more probability to use emergency care than those women with medium and high educational level, although in this case it was not statistically significant, the results did show a trend ($p < 0.10$). Those women dedicated to unpaid household labor (OR: 0.76; CI 95%:0.65–0.98; $p < 0.001$) had lower probability to use emergency care than the others work status categories (workers, unemployed, pensioners and students). Women with unmet need care health had 1.57 more probability to use emergency care than women without unmet health care need. Finally, women living in residence townships with less than 10,000 inhabitants had lower probability to use emergency care than those women living in residence townships with more than 10,000 inhabitants.

C statistics shower a fair explanatory capacity of the models developed. The regression models conducted with adjustment variables of Andersen's model of use of health care had great explanatory power than age-adjusted models only. In all case (model of informal care and use of emergency care), the explanatory capacity of the model was higher form men than form women.

5. Discussion

This study aims to observe how gender determinants influence informal care and the use of the emergency health service. Its results are interesting because they show a snapshot of a sector of gender inequalities in health 10 years after the passing of the law on equality between men and women in Spain. Our data show that women are still more involved in caring for dependents than men and use the emergency health service more than men. This is consistent with data from countries with health systems that aim for universal health coverage at the global level, but does not always imply a steady progress towards equity and reduction of health inequalities (de la Salud 2018).

The differences found between women and men show the existence of gender inequalities in the use of these basic services, which highlights the fact that the variables that intersect with gender (Haeberer et al. 2019; Escuela Andaluza de Salud Pública 2013), such as age, socio-economic level or employment status, continue to mark inequality in the use of health resources. In this sense, it is also important to take into account the subjective aspect of health and the use of health services, where men may use these services less because of their male role and not recognize that they feel ill (Courtenay 2000; Soto-Gordoa et al. 2019).

In addition, expectations related to gender stereotypes, such as caregiving tasks, continue to show feminization in the responsibility for care (Fernández et al. 2019; Garciá-Altés et al. 2018; García-Mochón et al. 2019). For example, our results show that, in use of emergency care, the probability to utilization increases in younger women and decreases in older women, which could be related to the incorporation of women into the world of work, the existence of double working hours (Puig-Barrachina et al. 2019) and the pressure of gender roles, which means that women do not have time to go to the health services and turn to the emergency services when they can no longer do so, and even consult more for family health problems than for their own (García-Mochón et al. 2019). Another possible explanation for the inverse relationship found between age and the use of the emergency health service in both men and women is that older people use other health care services, such as primary care, more than the emergency health service. Furthermore, it is also known that these population groups (older people) do not use health services more because of health needs, but also because of factors related to higher health attendance and socialization, factors that are not seen to influence the use of the emergency health service (Cortès-Franch and López-Valcárcel 2014; Lostao et al. 2001).

The social gradient present in the use of the health care services studied, mainly among women, as a disadvantaged social class in the use of the health care services analyzed, is consistent with what has been described by other authors. Likewise, previous studies show that women who work in agriculture and livestock farming have a worse health situation (Karttunen et al. 2016), as well as pensioners, who, after retirement, report lower subjective wellbeing when they have been exposed to situations of job insecurity and lower socio-economic status (Barrech et al. 2016). This social disadvantage, related to their socio-economic position, has been found to have a direct influence on the existence of social inequalities in the use of care services (Aguilar-Palacio et al. 2016; Sarría-Santamera et al. 2015). Throughout the scientific literature, we can find several studies that show the existence of a social gradient in the use of health care services (Parra-Casado et al. 2018; Sánchez-Recio et al. 2020, 2021). Less favored social classes mainly use primary care and health emergency services, mainly related to the lack of health culture and the lack of use of preventive services, and the more favored social classes use more specialized care (Abásolo Alessón et al. 2014; Abásolo Alessón et al. 2008; Urbanos-Garrido and Lopez-Valcarcel 2015; Urbanos-Garrido 2016).

Labor markets and environments are not neutral to gender demands (Connell 2012); they are places where inequalities are generated and reproduced. The sexual division of labor determines access to the labor market. The demands of each position, responsibilities and the structure of the organization are designed to maintain this unequal and unfair division (Heredia et al. 2011), which maintains the status quo, making it difficult to reconcile work with family and personal life, which is more demanding and problematic for women's health (Puig-Barrachina et al. 2019).

The lower likelihood of men and women using health services is consistent with the findings of other studies (Fernández et al. 2019; García-Mochón et al. 2019). The impact of such care is still greater for women than for men. An increase in the number of male caregivers has now been observed, which may be related to debates about gender and masculinity that seek to engage men in equity in health care. This change may bring about long-term change (Del Pino et al. 2018), although the stereotype of male heroes and female careers is still reinforced today, with women continuing to assume the longest hours and the greatest burden of caregiving (Fernández et al. 2019; García-Mochón et al. 2019).

Limitations and Strengths

This article shows the presence of gender inequalities in both emergency health service use and informal care. These data are of interest for more efficient management of care services and care for dependent persons, but it is nevertheless necessary to take into account the possible limitations of the study. One of the main limitations is that it is a cross-sectional study, although repeated over time with populations of similar characteristics. Cross-sectional studies are not useful for establishing causality, but they do help to generate research hypotheses and cross-sectional studies such as this one, with nationally representative samples and repeated over time, help to show a true picture of the situation under study. It should also be borne in mind that these data are self-referenced by the individual, but to correct for this possible bias, weighting factors have been used in all analyses. Previous studies comparing the results with health surveys and administrative data show similar results (Aguilar-Palacio et al. 2016; Søgaard et al. 2004). Finally, even though health surveys nowadays require the inclusion of more variables to analyze gender inequalities in health (Gil-Borrelli et al. 2018), numerous modifications have been made since they were first carried out (1983) to include these types of variables and thus favor the study of gender inequalities in health (Borrell et al. 2004; Ruiz-Cantero et al. 2011). For all these reasons, we believe that the validity of health surveys as a source of information for analyzing health inequalities in all their aspects has been demonstrated.

6. Conclusions

In conclusion, it is important to think about the life cycle perspective and how gender impositions appear to be reconstructed in younger women, who end up being caregivers (life-supporters in periods of crisis) and go to the emergency room less often because they have to take care of other people, and in a way that seems cyclical, when they are older, they go less often to consult about their own health. This is especially relevant in a country with universal health coverage, more than ten years after the passing of the law on effective equality between men and women. These results serve to highlight the need for co-education, co-responsibility in care, and the organization and creation of social and health policies that achieve effective equality between men and women.

They also show the need to take real, practical measures to promote effective equality between men and women, such as co-responsibility social policies, support for women during periods of leave to care for dependents or minors, training, and coeducation to eliminate glass ceilings, better accessibility to health services.

In this respect, the current crisis brought about by the Coronavirus Disease COVID-19 pandemic has made informal care even more relevant, further burdening informal caregivers. Despite this, this socio-health crisis has generated new health management strategies such as telemedicine that should be used to attend to groups such as these informal carers who, due to lack of time, neglect their own care and see their health worsen.

Likewise, it is also necessary to promote social policies for the care of dependent persons that help informal carers to have time for their own self-care, periods of rest, and recovery in all spheres of health. It is important to bear in mind that, in order to care well, one must first take good care of oneself.

7. Future Research

This study is based on data provided in 2017, after the economic crisis of 2008. In fact, 2014 is considered the first year to emerge from the economic crisis. Therefore, these data do reflect the situation of the Spanish population years after the major economic recession. The data obtained can serve as a reflection of the situation we are currently experiencing with the crisis produced by COVID-19. With these types of data, we have observed the existence of gender inequalities both in the use of health emergency services and in informal care. Despite this, it is necessary to carry out studies that analyze the presence of inequalities also between generations and between subgroups, and not only comparing the most favored groups against the least favored, as well as the social gradient and gender inequalities within them.

On the other hand, it would be interesting to carry out longitudinal studies that monitor, in the long term, the presence of these inequalities and how the different measures developed help to reduce health inequalities. All of this would be enriched with local studies that allow us to see and analyze inequalities in the territory itself, gathering the experience of both patients and professionals themselves.

Finally, together with research, it would be interesting to promote active equality policies that help to reduce these gender inequalities, such as maternity policies and aid for family reconciliation, active employment aid to reduce gender gaps between men and women and, finally, equitable health planning that manages to adapt differentiated care services for both men and women, since, as we have observed, the needs of both are not the same.

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