Research article

Mental health in a heterogeneous clinical sample. A cross-sectional study of predictors and gender differences

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ABSTRACT

Introduction: Women have been shown to be a vulnerable group in relation to mental health problems over time. Despite this, gender-focused studies are uncommon. The aim of this research is to study mental health in a sample of people with mental health problems and to analyze the differences and predictors focusing on gender.
Methods: A cross-sectional study is conducted in a heterogeneous clinical sample in terms of mental health problems (N = 160). Interviews with hetero-reported standardized questionnaires to collect the data are conducted. Descriptive analyses, mean difference and a regression analysis on mental health are carried out taking into account different sociodemographic, clinical and psychosocial variables.
Results: Women in the study present worse levels of mental health and subjective severity of the disorder. The main predictors of mental health are being female, followed by severity, shorter time with the diagnosis and internalized stigma.
Conclusion: Being female is the most robust predictor of worse mental health and symptomatology. Recommendations according to the results found proposing a gender perspective are suggested.

1. Introduction

Mental health is defined as a central component of general health, understood as a "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2001). Recently reported data on mental health problems are quite alarming: suicide is the second leading cause of death among young people worldwide; people with major depression and schizophrenia are 40–60% more likely to die prematurely; and together, mental, neurological and substance use disorders represent the 13% of the total global burden of disease in 2004, while depression alone accounted for 4.3% of the global burden of disease (WHO, 2021). In Spain, according to the results of the latest National Health Survey (ENSE, 2017), more than 10% of the population reported having been diagnosed with a mental health problem, with almost 4% reporting limitations in activities of daily living. Additionally, a recent review revealed that mental disorders account for 2.2% of the gross domestic product, with frequent association with several chronic diseases, and depression being the first cause of disability attributed to a single disease (Ruiz-Rodríguez et al., 2017).

In relation to gender and mental health, when this variable is taken into account, it has been shown that women suffer a higher prevalence of mental disorders (Asher and Aderka, 2018; Salk et al., 2017), doubling the data in the case of Spain (14.1% in woman compared to 7.2% in men) (ENSE, 2017). Women also show a greater affectation in terms of disability (WHO, 2021), being internalized psychiatric symptoms related to excessive arthritis, headaches and gallbladder removal in women (Needham and Hill, 2010). Additionally, the Covid-19 pandemic and its detrimental effects on mental health have shown that women have been a particularly vulnerable group where a greater impact on mental health has been detected in different countries (Almeida et al., 2020; Connor et al., 2020; Hossain et al., 2020). In Spain, it has been found that women suffered higher levels of anxiety and symptoms of depression and post-traumatic stress disorder during the pandemic and after deconfinement (Ausín et al., 2020a; González-Sanguino et al., 2020a; González-Sanguino et al., 2020b; González-Sanguino et al., 2020c).

The greater affectation of mental health in women, in addition to biological aspects, may be also based on cultural and social factors. Within families, women tend to bear a greater share of the burden of care, as they

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are accustomed to care-giving (Minello et al., 2021), as women have historically provided on average 3.3 times more care than men in the household (Addati et al., 2018). According to some studies this caregiving overload may be related to the increased prevalence of mental disorders in women (Ausín et al., 2020b; González-de Paz et al., 2016; Zygouri et al., 2021). Additionally, different systematic reviews have reported a consistent relationship between being a victim of domestic violence and abuse and having mental disorders across the diagnostic spectrum, as well as sexual and other types of violence have also shown consistent relationships with the presence of depression, anxiety and post-traumatic stress (Oram et al., 2017). On the other hand, the consequences of mental health problems are not only limited to the clinical or health domain, with several studies showing that all aspects of quality of life are vulnerable to mental health conditions (Ausín et al., 2020b; Martínez-Alonso et al., 2007; Nouri et al., 2021; Sivertsen et al., 2015). A recent Spanish study (AVIFES, 2018), shows important differences in the quality of life outcomes of women with mental health problems compared to other women (with and without disabilities), as well as to men with mental health problems. This study indicates that women with a mental health diagnosis show poorer emotional, physical and material well-being, as well as they have more difficulty accessing specialized social support resources than the men studied.

In addition, people with a diagnostic label also face stigma and discrimination in a society full of prejudices and stereotypical ideas about mental disorders (Corrigan and Watson, 2002), being usually discriminated against in different areas such as access to employment or housing (Fox et al., 2018). In addition, the internalization of the social stigma of those affected by a diagnosis (Livingston and Boyd, 2010), often generates self-discriminatory and harmful behaviors (Yanos et al., 2008), reduction of the attempts to get better ("*why try?*") (Corrigan et al., 2010), and in general a worse recovery (Link et al., 2001). Here again, women may be doubly harmed, as the intersectional stigma suggests (Fredman, 2016; McCall, 2005). From this perspective multiple stigmatizing identities interact with each other, increasing the discrimination and stigma experienced by these individuals and leading to more negative outcomes (e.g. a woman may be discriminated against for being female and having schizophrenia; or internalized sexist attitudes may interact with internalized stigmatizing attitudes of illness "*women are more sensitive than men, so my problem is probably that I am overreacting or I am just hormonal*"). In this way, women are once again at a disadvantage, as revealed by some studies which point out that discrimination experienced by women when assessing internalized stigma is higher than in men (Khan et al., 2015), women who have experienced some form of gender discrimination report worse levels of mental health (Hackett et al., 2019), and that even intersectional stigma can be a barrier to accessing health care (Mora-Ríos and Bautista, 2014).

Despite the evidence of a greater affectation in relation to mental health in women, as well as the evidence of greater discrimination, there continues to be a gender gap in terms of studies focused on mental health. Research with a gender perspective, or with data analysis focused specifically on this variable, is uncommon. In Spain, and as far as the authors are aware, there are no known studies focus specifically on the effect of gender in mental health and symptomatology in clinical samples together with variables such as internalized stigma. Given the above, our main hypothesis is that symptomatology and mental health will be different in men and women, as well as there will be differences in other variables such as the internalized stigma or the quality of life. Thus, the aim of this research is to study mental health in a clinical sample of people in Spain, looking for predictors for symptomatology and focusing on the role of gender and possible differences between men and women.

2. Methods

2.1. Procedure

Research was carried out between 2019-2021 in different specialized mental health care centers in the Community of Madrid and Castilla and Leon, Spain: a hospital psychiatry outpatient mental health service, the rehabilitation network for severe mental disorders and a university psychology clinic. Initially, the professionals who usually attended the individuals informed them verbally and in writing about the study. Subsequently, individualized interviews were conducted with those who wished to participate. The duration of the interviews was about 45 min, including the signing of the informed consent form. The research was approved by the deontological and ethical services of the Complutense University of Madrid (2017/18-018) and the different mental health care centers.

2.2. Sample

Of the 164 participants recruited, 160 completed the evaluations in full (N = 160). 111 persons were recruited from the psychiatry outpatient mental health hospital and the university psychology clinic; while 49 were users of the rehabilitation network for severe mental disorders. The proposed inclusion criteria were the following: age between 18-67 years (age limit according to the criteria of the care centers); receiving psychiatric or psychological treatment; having adequate levels of literacy. The exclusion criteria established were: having cognitive impairment; presenting substance abuse as the main pathology; manic or agitated states that prevented the completion of the evaluation; as well as having severe vision problems.

2.3. Variables and instruments

Sociodemographic variables: A data sheet was used to record age, gender, place of residence (rural, medium-sized city, large city), marital status (married, single, divorced, widowed), last studies completed (no studies, elementary, high school/vocational training, university), occupation (working, unemployed, sick leave, retired, disabled, student), and attentional resource (rehabilitation network for severe mental disorders, hospital outpatient psychiatry service, university psychology clinic).

Clinical variables. Diagnosis, duration of mental disorder, time to seek professional help, severity of the mental disorder, mental health symptomatology.

Diagnosis. Reported by the person or, in case of unknown, by his or her professional of reference according to the American Psychiatric Association criteria (APA, 2013). (Schizophrenia Spectrum Disorders, Bipolar, Depressive Disorders; Anxiety Disorders; Obsessive-Compulsive Disorder; Personality Disorders).

Duration of mental disorder (years). Assessed by a direct question: "How long has it been since you first had symptoms/problems?" (Years; less than 1 year specify months).

Time to seek professional help (years). Also assessed by a direct question: "How long did it take from the time you had the first symptoms/problems until you asked for help from a mental health professional?" (Years; less than 1 year specify months).

Severity of the mental disorder. Measured by the Clinical Global Impression Scale (CGI) hetero-applied version (Guy, 1976). This instrument provides a subjective measure of the person's state in relation to his or her psychological problems. It consists of two subscales of Likert-type items: severity of the mental disorder [0 (not evaluated), up to 7 (extremely ill)] and overall improvement relative to treatment [0 (not evaluated) up to 7 (much worse)].

Mental health (symptomatology). Measured by the Goldberg General Health Questionnaire, Spanish version (GHQ-28) (Lobo et al., 1986). This test consists of 28 Likert-type items (0–4) grouped into four subscales that measure different symptomatology: 1) Somatic symptoms (feelings of exhaustion, weakness or illness and bodily discomfort); 2) Anxiety and insomnia (nervousness, tension, anxiety symptoms and sleep problems); 3) Social dysfunction (social impairment and problems in the ability and enjoyment in the performance of daily responsibilities and activities); 4) Depressive symptoms (thoughts and feelings of personal depreciation, sadness, hopelessness and suicidal thoughts). The higher the score the more symptomatology or worse general health. α Cronbach = .94.

Psychosocial variables: Internalized Stigma, Self-esteem, Quality of Life

Internalized Stigma. Measured by the Internalized Stigma of Mental Illness (ISMI) (Ritsher et al., 2003). It consists of 29 items in Likert-type format (1 = strongly disagree, and 4 = strongly agree) and assesses the subjective experience of stigma by those suffering from a mental illness. Items are grouped into 5 factors that refer to the different dimensions of EI: 1) Alienation (emotional); 2) Assignment of stereotypes, (cognitive); 3) Isolation (behavioral); 4) Experiences of discrimination; 5) Resistance to stigma. Higher scores indicate more IS. α Cronbach obtained = .85.

Self-esteem. Rosenberg's Self-esteem Scale (RSE) (Rosenberg, 1965). This scale explores the personal self-esteem understood as feelings of personal worth and self-respect. Composed of 10 items with Likert-type format, high scores on the questionnaire indicate higher self-esteem. α Cronbach = .87.

Quality of Life. Assessed through the reduced version of the World Health Organization Quality of Life Scale (WHOQOL-BREF) (WHO, 1998). Composed of 26 questions, two general questions on quality of life and satisfaction with health status; and 24 questions grouped into four areas: 1) Social Relationships (satisfaction with personal relationships, social support and sexual activity); 2) Physical environment (economic resources, safety, freedom and home environment, access to health and care, opportunities for leisure and free time activities, access to transportation or mobility); 3) Physical Health (capacity and satisfaction with daily activities, medication intake, energy, mobility or work capacity); 4) Psychological Health (presence of positive and negative feelings, body image, self-esteem, ability to concentrate, memory and learning and personal beliefs). The response scales are Likert-type, with 5 response options. Higher scores indicate better quality of life. WHOQOL-BREF domain scores demonstrated good discriminant validity, content validity, internal consistency and test-retest reliability. α Cronbach = .80.

2.4. Data analysis

Descriptive analyses according to sociodemographic and psychosocial variables were carried out, together with tests of mean differences by independent samples *t*-tests according to sex. In order to examine the relationships between the general health and rest of the variables in the study an independent linear model was carried out. Model was adjusted for least squares and the definitive model was established by contrasting models that are based on the significant increase in R^2. Compliance with the assumptions was assessed by visual inspection of the linearity, normality, and homogeneity of residuals. The results also provide a correlation matrix. All analyses were conducted using R version 3.6.3 (Team, 2013).

3. Results

3.1. Sociodemographic characteristics of the sample

The sample consisted of a slightly higher percentage of women (54.38%), with a total mean age of 45.38 years. Most people were single (56.25%) and lived in medium-sized cities (43.75%) at the moment of the interviews. A majority of people had university (56.25%) or high school education (34.38%), but in contrast we found that a large percentage of people were retired or with an incapacity (37.5%, 36.25%). Additionally, most of the people were in outpatient care in a hospital outpatient psychiatry service (69.38%), with almost 30% of the sample being attendant in the rehabilitation network for severe mental disorders. More sociodemographic characteristics can be seen in Table 1.

3.2. Clinical and psychosocial variables

Most of the diagnoses in the sample corresponded to anxiety disorders (39.38%), followed by depression (22.5%) and schizophrenia spectrum disorders (19.38%). The mean duration of the diagnoses was 12.08 years. In relation to general health and symptomatology, a mean score of M =

Table 1. Sociodemographic characteristics, diagnosis and mean duration of the disorder of the sample.

	Variables	Total N (%)	Men	Woman
Gender	Male	73 (45.63)		
	Female	87 (54.38)	N (%)	N (%)
Age	<35	103 (64.38)	19 (26)	19 (21.8)
	36–55	23 (14.38)	37 (50.7)	37 (42.5)
	<56	34 (21.25)	17 (23.3)	31 (35.6)
Place of residence	Medium-city	70 (43.75)	44 (60.3)	59 (67.8)
	Rural	30 (18.75)	10 (13.7)	13 (14.9)
	Large-city	6 (3.75)	19 (26)	15 (17.2)
Occupation	Working	10 (6.25)	30 (41.1)	40 (46.0)
	Unemployed	25 (15.63)	14 (19.2)	16 (18.4)
	Sick leave	19 (11.88)	3 (4.1)	3 (3.4)
	Retired	60 (37.50)	5 (6.89)	5 (5.7)
	Incapacity	58 (36.25)	13 (17.8)	12 (13.8)
	Student	42 (26.25)	8 (11)	11 (12.6)
Last studies completed	University	90 (56.25)	30 (41.1)	30 (34.59)
	High school	55 (34.38)	25 (34.2)	33 (37.9)
	Elementary	13 (8.13)	18 (24.7)	24 (27.6)
Marital status	Single	90 (56.25)	56 (76.7)	34 (39.1)
	Married	55 (34.38)	17 (18.1)	38 (43.7)
	Divorced	13 (8.13)	0	13 (14.9)
	Widowed	2 (1.25)	0	2 (2.3)
Care resource	Rehabilitation network	47 (29.4)	32 (43.9)	15 (17.24)
	Outpatient psychiatry service	94 (58.8)	32 (43.8)	62 (71.3)
	University psychology clinic	19 (11.9)	9 (12.3)	10 (11.5)
Diagnosis	Schizophrenia	31 (19.38)	25 (34.2)	6 (6.9)
	Bipolar	13 (8.13)	5 (6.8)	8 (9.2)
	Personality	7 (4.38)	1 (1.4)	6 (6.9)
	Depression	36 (22.50)	13 (17.8)	23 (26.4)
	Anxiety	63 (39.38)	24 (32.9)	39 (44.8)
	OC	10 (6.25)	5 (6.8)	5 (5.7)
Duration of the disorder (years)		M (SD)	M (SD)	M (SD)
		12.08	12.59 (10.73)	11.66 (9.65)
TOTAL		160 (100)		

OC = obsessive compulsive.

36.76 (SD = 1.51) was obtained on the GHQ-28, and a mean of M = 5.73 (SD = .21) on the CGI.

In relation to the psychosocial variables, a mean score for total quality of life M = 42.43 (SD = 1.84) was obtained in the WOQOL-Brief. For internalized stigma, a mean score of 59.01 (SD = 1.14) was obtained on the ISMI, and for self-esteem a mean score of 25.96 (SD = .46) on the RSE. The detailed results can be seen in Table 2.

3.3. Gender differences

In relation to the sociodemographic characteristics of the sample, it should be noted that a similar proportion of men and women were found in terms of age, place of residence, occupation and studies. However, with regard to marital status, most men were single (76.7%), in contrast to a much lower proportion of women (39.1%). Regarding the care center, we also found differences, with a higher proportion of men vs. women being attended in the rehabilitation network (43.9% vs. 17.24%). This is consistent with the differences in the proportion of diagnoses found in the sample, where schizophrenia is more frequent in men (6.9% women vs. 19.38% men), while anxiety is more frequent in women (44.8% women vs. 39.38% men). Sociodemographic data according to gender can be observed in Table 1.

Regarding clinical variables, significant differences were found in mental health and symptomatology assessed by the GHQ-28 ($t = 2.85$, $p = .005$), and in the severity of the disorder measured by the CGI ($t = 2.21$, $p = .028$) with women showing higher scores in both cases. In relation to psychosocial variables, women showed significantly higher scores than men in quality of life assessed by the WHOQoL-brief ($t = 3.24$, $p = .001$) and lower scores in internalized stigma, measured by the ISMI ($t = -2.41$, $p = .017$). No statistically significant differences were found in self-esteem assessed using the RSE ($t = -1.27$, $p = .20$). Detailed results can be found in Table 2.

3.4. Correlations and mental health predictors

A linear regression model explaining 48% of the variance was obtained, with female gender, level of severity of the mental disorder, a longer duration of them and the internalized stigma as predictors ($F_{(4, 155)} = 37.6$, $p > .05$, $R^2 = .49$, adjusted $R^2 = .48$). Results in detail of this model can be seen in Table 3 and the original correlation matrix in Table 4.

The standardized coefficients of the model show predominantly an influence of gender on general health with a coefficient of .42 ($t = 3.56$, $p < .001$), which implies a large increase in health as a result of being female versus male. The second most influential variable was the severity of the mental disorders with a coefficient of .14 ($t = 6.53$, $p < .001$). The other two variables introduced in the model (duration of the mental disorder and the internalized stigma were also significant, with standardized coefficients of -.02 and .03 respectively. No other variable of those analyzed in the study showed a significant effect on general health. The model was particularly relevant and significant for its explanatory capacity, with an adjusted R^2 of .48, indicating that almost 50% of the participants' general health can be explained by the variables introduced in it. The correlation matrix reproduces the aforementioned result, showing reasonably high and significant correlations between general health (GHQ-28) and the variables CGI and ISMI ($r = .41$ and $r = .43$, respectively). Also noteworthy is the significant relationship between CGI and the variables ISMI ($r = .33$) and RSE ($r = -.33$).

4. Discussion

The aim of this study was to study mental health and symptomatology in a clinical sample of people with different mental health diagnoses, in addition to the study of predictors of mental health considering the gender and the differences between men and women. The results reveal worse mental health in women, being the gender the predictor with the greatest weight in the regression analyzes of the symptomatology, along with other variables such as internalized stigma or the severity of the disorder.

The sample had a slightly higher proportion of women than men, with an average age of 45 years, and a duration of mental disorders of about 12 years. Most of the people in the sample were in outpatient care in a psychiatric service of a hospital, and the 30% were in the rehabilitation network for severe mental disorders. Most of the diagnoses in the sample

Table 3. Results of the linear model on general health.

Adj. R-squared: 0.48	β	SE	β (Std)	t
Gender (female)	8.21	2.31	.42	3.56***
Duration of the mental disorder	-.53	.11	-.02	-4.80***
CGI	2.82	.43	.14	6.53***
ISMI	.53	.08	.03	6.34***

CGI = Clinical Global Impression; ISMI = Internalized Stigma of Mental Illness; β = beta coefficient; SE = standard error; β (Std) = standardized beta coefficient; *t* = t value; * = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Table 4. Correlation matrix.

	GHQ-28	CGI	QoL	ISMI
CGI	0.41***	1	-	-
QoL	-0.13	-0.17*	1	-
ISMI	0.43***	0.33***	-0.12	1
RSE	-0.31	-0.33***	0.11	-0.25***

GHQ-28 = General Health Questionnaire; CGI = Clinical Global Impression; QoL = Quality of life. World Health Organization Quality of Life Scale; ISMI = Internalized Stigma of Mental Illness; RSE = Rosenberg's Self-esteem Scale; * = $p < .05$, ** = $p < .01$, *** = $p < .001$.

corresponded to anxiety disorders, followed by depression, which are the mental disorders with the highest prevalence rates in different international and Spanish studies (Kessler, 2007; ENSE, 2017; Olariu et al., 2015; Volkert et al., 2013).

In relation to the mental health and symptomatology, a mean score of $M = 36.76$ ($SD = 1.51$) was obtained on the GHQ-28. These values report very low levels of mental health in the sample, considering that the Spanish version of the GHQ-28 correctly identifies 85% of the "cases" with a cut-off score of 6/7 (sensitivity 76.9%, specificity 90.2%), and 83% of the "cases" with a cut-off score of 5/6 (sensitivity 84.6%, specificity 82%) (Lobo et al., 1986). Along with the low levels of mental health, the people in the sample largely rate their mental health problems as severe. This contrasts with the distinction in diagnoses of severe vs. other mental disorders, although as Zimmerman et al. (2018) points out, the severity of a diagnosis can be independent of its categorization, and truly severe anxiety or depression can be found. In addition, women show higher scores on the GHQ-28 than men, indicating poorer mental health, also showing the highest scores on subjective levels of severity of their mental health problems.

In relation to quality of life, values of the sample are below the average values of the Spanish population ($M = 56.8$) evaluated with the same measure (WOQOL-Brief) (Skevington et al., 2004). And surprisingly, women showed a better quality of life than men, in spite of presenting more symptoms. This may be due to the more optimistic subjective assessment of women, or to the presence of greater resilience. Although, as we have seen in the Introduction, the quality of life of

Table 2. Results in the different questionnaires and mean differences in relation to gender.

	TOTAL		Women		Men		t	p
	M (SD)	CI	M (SD)	CI	M (SD)	CI		
GHQ-28	36.76 (1.51)	33.77–39..76	40.65 (2.11)	36.45–44.85	32.13 (2.06)	28.02–36.24	2.85	.005
CGI	5.73 (.21)	5.30–6.16	6.17 (.29)	5.59–6.75	5.21 (.31)	4.58–5.85	2.21	.028
QoL	42.43 (1.84)	38.78–46.08	47.76 (2.27)	43.24–52.28	36.07 (2.85)	30.38–41.77	3.24	.001
ISMI	59.01 (1.14)	56.75–61.27	56.51 (1.46)	53.60–59.42	61.98 (1.74)	58.50–65.46	-2.41	.017
RSE	25.93 (.46)	25.01–26.85	25.39 (.66)	24.07–26.70	26.57 (.64)	25.28–27.86	-1.27	.20

GHQ-28 = General Health Questionnaire; CGI = Clinical Global Impression; QoL = Quality of life. World Health Organization Quality of Life Scale; ISMI = Internalized Stigma of Mental Illness; RSE = Rosenberg's Self-esteem Scale; M = mean; SD = standard deviation; CI = confidence interval; *t* = t value; *p* = significance level

women in general, and of women with mental disorders in particular, is lower than that of men, it is interesting to note some data that go against these results. In the AVIFES study (AVIFES, 2018) conducted in Spain, women with mental disorders have significantly higher scores than men with mental disorders in the well-being variables: self-determination and rights. The work done in social resources for the empowerment of women with the aim of protecting, defending and exercising their rights, has a positive impact on these two dimensions, but it is necessary to continue to acquire new skills (e.g. to have a better understanding of the strategies to develop themselves, to take the initiative, to express their opinions, to claim their rights…). Additionally, regarding self-esteem, the scores obtained show average levels of self-esteem, similar to those obtained by other studies in Spain that included a variety of mental health diagnoses in their samples or included people with anxiety problems (Baños and Guillén, 2000; Vázquez Morejón et al., 2004), and no significant differences were found between men and women.

In terms of internalized stigma, around half of the participants presented average scores on the ISMI scale (49.8%) with almost 20% showing moderate or severe internalized stigma (19.1%). In relation to gender and internalized stigma, the results of previous research are contradictory, finding, as in this research, studies revealing higher internalized stigma in males (Mackenzie et al., 2019; Oliffe et al., 2016), in others a higher stigma in women (Tesfaye et al., 2020), or no significant differences (Szcześniak et al., 2018; Kehyayan et al., 2021). One explanatory hypothesis is that perhaps men are quicker to take up certain aspects of public stigma and apply them to themselves, conflicting with gender roles (Mackenzie et al., 2019), such as, for example, the stigmatizing idea that associates depression with weakness or greater sensitivity. Traditional norms associated with the male gender tend to advocate stoicism, self-reliance and lack of emotional expression, so a man who shares these normative beliefs is more likely to experience internalized stigma if he has a mental health problem (Hammer et al., 2013; Vogel et al., 2011).

The linear regression model obtained explains 48% of the variance, with the main predictors of poorer mental health being female, and rating one's mental health problem as severe. Followed by shorter duration of the mental disorder, and having greater internalized stigma. The model has female gender as the main and strongest predictor, again identifying women as a vulnerable group, and perhaps supporting studies on the impact of violence on women and the consequences for their mental health (Oram et al., 2017); the negative effect of the burden of informal care (Cascella Carbó and García-Orellán, 2020); and the impact of discrimination on women's mental health (Hackett et al., 2019). This last argument is particularly remarkable because of the presence of internalized stigma as a predictor variable, previously demonstrated as a variable related to poorer mental health and symptomatology (Del Rosal et al., 2020). Thus, although the sample shows worse internalized stigma in men, the hypothesis of intersectional discrimination (Fredman, 2016) shows how women can be doubly vulnerable to being stigmatized: because of their condition as women and because of their mental problems, having a greater probability of internalizing stigma and suffering its negative consequences (McCall, 2005). In addition, in relation to the model, it should be noted that other predictor variables are the assessment of the severity of the disorder, as well as a shorter mental duration of the disorder. Thus, it seems that the greatest symptomatology and worst mental health will be found in the most severe disorders and in their most acute moments, since it is likely that over time the symptoms tend to remit or become more residual and not so prototypical.

In accordance with results, some lines of action are proposed. Considering that the female gender variable is the most relevant predictor of poorer mental health, it seems appropriate for governments, public administrations, and other organizations to promote health and equality plans that include strategies with a gender perspective. To these initiatives should be added other actions aimed at reducing the burden of informal care that falls on women and promoting work-life balance and equality plans (Artola and Muñoz, 2018). This may be particularly important in Spain, where traditionally and with an aging population, women have been confined to the home as caregivers or combining domestic, caregiving and other work. Women are particularly affected by the burden of the caring role, which in many cases is experienced as a source of guilt and excessive responsibility. Unlike men with a mental disorder, the family context expects women to take care of family burdens, relegating their needs to a secondary role (AVIFES, 2018). On the other hand, campaigns or actions aimed at dealing with intersectional discrimination and reducing social or internalized stigma are also advisable, as they are likely to have direct effects on the request for professional help and access to health resources (Clement et al., 2015; Lannin et al., 2015). Although the existence of national anti-stigma campaigns is common in other countries (Gronholm et al., 2017), in Spain there are some programs and campaigns focused on reducing social (Rodríguez-Rivas et al., 2021; Rubio-Valera et al., 2016) or internalized stigma (González-Domínguez et al., 2019), although for the moment there is no nationwide initiative throughout the country. Furthermore, according to the results obtained, it seems important to include protocols for the detection of a possible mental disorder in primary care so that people with a possible mental disorder are detected, diagnosed and treated as early as possible, avoiding waiting for more time to pass and for their psychosocial functioning, quality of life and health to be affected. Finally, we recommend continuing with the study of mental health from a gender perspective by carrying out different research (qualitative, longitudinal, studies that integrate cultural variables...) that can provide more knowledge about the phenomenon and mitigate the existing differences.

The study has several limitations. First of all, it is an incidental sample, which may not represent the Spanish population with a mental disorder, as well as being a small sample in which only those people who showed interest and voluntarily agreed to be interviewed participated. Furthermore, as mentioned above, the study is limited to a Spanish sample, so there may be limitations in generalizing the results to other societies or cultures. Another limitation is that the mental health diagnosis was not obtained through the application of a structured diagnostic interview that guarantees reliability, but was reported by the people in the sample themselves or by a professional from the care service, not necessarily a health professional, after reading the person's clinical history. In addition, it should be noted that the mean to assess symptomatology and mental health (GHQ-28) does not cover all types of symptoms, so, perhaps more residual or negative symptomatology has not been represented, biasing the results.

This study emphasizes the importance of gender in mental health, showing how being a woman is a clear predictor for the presence of greater symptomatology and poorer general health. In addition, as other predictors, it is found that mental disorders are assessed as severe, with less time of duration and in which the person has internalized the stigma. These results allow us to extract some guidelines for action and recommendations that help to generate useful intervention strategies with a gender perspective in mental health.

Declarations

Author contribution statement

Clara González-Sanguino: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Berta Ausín: Conceived and designed the experiments; Analyzed and interpreted the data; Wrote the paper.

Miguel Ángel Castellanos: Conceived and designed the experiments; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Manuel Muñoz: Conceived and designed the experiments; Wrote the paper.

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