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Detection and treatment of depressive disorder in the spanish health system: a critical review

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RADIOGRAFÍA DE LA DETECCIÓN Y EL TRATAMIENTO DEL TRASTORNO DEPRESIVO EN EL SISTEMA DE SALUD PÚBLICO ESPAÑOL: UNA REVISIÓN CRÍTICA

ABSTRACT

Health care for depression is a major challenge. The aim of this review is to capture the status of the detection, diagnosis and treatment of depression in the Spanish public health system. The data from the latest National Health Survey (ENSE 2017) have been analyzed and a non-systematic search for publications has been carried out in the PubMed and Scopus databases. We highlight the high specificity and low sensitivity in the detection of cases of major depression by Primary Care (PC) physicians in Spain. The detection of depression is superior in specialized care compared to PC. The new healthcare systems based on the shared approach and the hierarchical model of screening, diagnosis and referral are reviewed and we present improvement proposals based on various programs and models of healthcare for depression.

Keywords: Depression, detection, diagnosis, treatment.

RESUMEN

La atención sanitaria de la depresión constituye un reto de primer nivel. El objetivo de esta revisión es plasmar el estado de la detección, diagnóstico y tratamiento de la depresión en el sistema de salud público español. Se han analizado los datos de la última Encuesta Nacional de Salud (ENSE 2017) y se ha realizado una búsqueda no sistemática de publicaciones en las bases de datos PubMed y Scopus. Destacamos la alta especificidad y la baja sensibilidad en la

detección de casos de depresión mayor por parte de los médicos de Atención Primaria (AP) en España. La detección de la depresión es superior en la Atención Especializada que en AP. Se revisan los nuevos sistemas asistenciales basados en el abordaje compartido y en el modelo jerárquico de cribado, diagnóstico y derivación, y planteamos propuestas de mejora a partir de diversos programas y modelos de atención sanitaria de la depresión.

Palabras Clave: Depresión, detección, diagnóstico, tratamiento.

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Depression care in general population: Epidemiological studies

Depression is one of the most prevalent mental disorder among general population, with more than 264 million people affected worldwide¹. In a recent systematic review with data from 30 different countries it was estimated that last year depression prevalence ranged around 7.2%².

In Europe, the ESEMeD epidemiological project explored mental health among general population in various European countries. Through the standardized interview "Composite International Diagnostic Interview" (WMH-CIDI) it was found that last year depression prevalence in Europe was nearly 3.9%³. Within this same project, in Spain 5500 adults from different provinces were interviewed. Results disclosed that in Spain 4 out of 100 people suffered from depression in the last year⁴.

The ESEMeD-Spain project collected data about the health services used among the interviewed⁵. According to these results, only the 48.9% of depressed people were attended by a health care professional; specifically, the 26.4% of the last year depressed people were attended by a primary care physician (PCP), 30.8% by a psychiatrist and 7.8% by a psychologist.

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Using clinical guides, protocols and scientific consensus, the ESEMeD project proposed what could be defined as a "minimally adequate treatment"⁵. At least one of the following criteria had to be met for its consideration: having received antidepressant treatment at least during 2 months added to at least 4 visits to a psychiatrist or a PCP (or any other doctor); or having received at least 8 psychotherapy sessions with a psychologist or a psychiatrist with an average duration of 30 minutes.

According to this definition, ESEMeD-Spain data revealed that only 35.8% of the depressed diagnosed patients were receiving a "minimally adequate treatment"⁵. These results concur with data found in other countries^{6,7,8}. The most influential factors to receive an optimum treatment for depression were: a high educational level, a high perceived health level and living in a big city⁵.

This data suggests that in Spain, despite having free and universal healthcare, detection, diagnosis and treatment of depression still have many deficiencies. Half of the people with depression do not seek help in Spanish healthcare system in order to overcome their symptoms. Moreover, looking for depression treatment do not ensure depression will be properly detected or that depression patients will receive a proper treatment.

NATIONAL HEALTH SURVEY IN SPAIN (ENSE): EPIDEMIOLOGICAL DATA

Data extracted from the National Health Survey in Spain (ENSE)⁹ allow us to analyze health resources search and procurement by depressed population in Spain. This survey, led by the "Ministry of Health, Consumer Affairs and Social Welfare" (MSCBS) in collaboration with the "National Statistics Institute" (INE), has been performed 9 times between 1987 and 2017. The ENSE data reflect the evolution of different health indicators in Spanish residential population. The data available in the "National Statistics Institute" webpage enabled us to study the health services use of the Spanish depressed population.

The following questions from the ENSE 2017 were considered to determine depression: *Have you ever had a depression throughout your life?*, *Have you had a depression in the last 12 months?*, *Have you been diagnosed with depression in the last 12 months?* Additionally, the ENSE 2017 survey collects items from the *General Health Questionnaire* (GHQ-12), a 12-items scale for psychiatric disorders screening in PC context or in general population^{10,11}. The GHQ-12 scale has been used as an alternative method to assess depression, and it can be used to detect depressive disorder in public health surveys¹². The GHQ score was obtained from dichotomous items and it ranges between 0 and 12. The

common cut point to consider depression using this scale is a punctuation equal or higher than 3. Despite that, in the current work we used a GHQ punctuation equal or higher than 5 for attaining a higher scale specificity¹³.

A total of 23.089 adults participated in the last survey (ENSE 2017)⁹. The 8.1% answered affirmatively the questions *"Have you had a depression in the last 12 months?"* and *"Have you been diagnosed with depression in the last 12 months?"* According to our GHQ depression detection criteria (GHQ-12 ≥ 5), 12% of Spanish general population would surpass this cut point. The 4.5% surpassed both GHQ criteria and reporting diagnosed depression during last year. This last percentage agrees with the depression punctual prevalence estimated by most of the epidemiological studies in our country^{4,14}.

Regarding medical resources used by depression diagnosed people in last year, 97% visited PCP during the last 12 months. Nonetheless, it remains unclear if the reason of these visits was the mental health problems or other medical problems. This percentage downsizes to 33% when were asked by the last time on a psychiatrist or a psychologist consultation. From all people with a GHQ total score equal or higher than 5, only the 52% reported visiting the PCP in the last 4 weeks, and only 21% reported sessions with a psychiatrist or a psychologist.

The ENSE 2017 data point out that 52% of people with a GHQ punctuation equal or higher than 5 received anxiolytics (tranquilizers, hypnotics) and 32% consumed antidepressants in the last two weeks. From those diagnosed with depression in the last 12 months, 73% used anxiolytics and 63% antidepressants during the last two weeks. Thus, 37% of depression diagnosed patients were not consuming any medication in the last two weeks, and 29% did not receive antidepressant treatment nor psychological care in the last two weeks. However, from this survey it is not possible to elucidate whether those under pharmacological treatment are the ones with more severe disorders, as it is not possible to clarify neither the exact percentage of untreated people with severe depression.

DEPRESSION CARE IN PC: DETECTION AND DIAGNOSIS PROBLEMS

Primary Care (PC) is the main gateway to health care system for people with depression^{15,16,17}. It is estimated that 80% of people who seek help for emotional disorders go to PC and are treated by its professionals^{18,19,20}.

Pence et al.²¹ proposed some recommended steps for depression detection and treatment in PC. They suggested that depressed people (1) should be clinically detected, (2) should start a treatment, (3) should get a proper treatment for their

symptoms and (4) should reach depressive symptomatology remission. These authors conducted a simulation from data published in different studies, finding that 125 out of 1000 patients (12.5%) that received a PC consultation presented a depressive disorder in the last year. According to this simulation, only 47% of patients with depression would be clinically detected ($n=59$), 24% would be treated ($n=30$), 9.6% would be properly treated ($n=12$), and only 6% would finally reach total or partial remission ($n=8$).

Correspondingly, a study performed in PC with 3815 patients in Spain²² found out that PCPs could only identify 20% of people who had been diagnosed with major depressive disorder through SCID-I. One of the main factors associated with a greater probability of receiving an accurate diagnosis was referring psychological symptoms as the main consultation reason. Results also exposed that PCPs provided a proper treatment to most of the patients (63%) when those were diagnosed by themselves. Besides, this study highlights the lack of detection of depressed patients by the PCPs compared with a psychiatric diagnosis gold standard (i.e., SCID-I).

Scientific literature highlights two main difficulties regarding depression diagnosis in PC: (a) underdiagnoses: to not diagnose depression in truly depressed people (false negatives); and (b) overdiagnosis, to diagnose depression in people who do not present the disorder (false positives). A considerable amount of literature on the underdiagnoses of depression in PC has recently emerged. These studies indicate that in the 35–60% of the cases, depression would not be detected by PC professionals^{23,24,25}. Despite depression overdiagnosis has been less studied, it is similarly reported that about 26.5% of people with depression in Spain were wrongly diagnosed, as they do not meet all required clinical criteria²⁶. Moreover, previous depressive episodes in "false positive" people were also associated with depression overdiagnosis²⁶.

A meta-analysis conducted by Mitchell et al.²⁵ reported that PCPs correctly diagnosed only 47.3% of depressive patients. This diagnosis sensibility oscillates from one study to other, with a variation range from 6.6% to 78.8%. Similar data are found in different studies^{27,28}, showing high specificity (81.3% to 92%) but low sensibility (47.3% to 50.1%) of the depressive disorder diagnosed by PCPs. Authors suggest that this may be due to some professionals reluctance to consider depression in people who meet diagnostic criteria²⁵.

DETECTION AND TREATMENT OF DEPRESSION IN SPECIALIZED CARE: DIFFERENCES REGARDING PC

Many studies disclose that nearly 25% of depressive patients are derived to public health care devices^{28,29,30}. In 2011 reasons of derivation and provenance of depressive patients

were analyzed³¹. Results show that 81% of valuable patients were referred to psychiatry consultation by another doctor and 19% went of their own free will. From those assigned by a doctor, 62% were referred by a PCP, 7.3% by an emergency doctor, 6.4% by a doctor of another specialty, 3% were referred after hospital discharge and 1.7% by other category doctors. The main reasons for referral to specialized care were symptoms deterioration (72.3%), lack of response to treatment (69.7%) and patient's own request (38.4%).

Another study compared depression detection between specialized care and primary care showing interesting results³³. Once models of logistic regression were adjusted by sociodemographic and clinic variables, likelihood of correct diagnosis was 17 times higher in specialized care than in PC. According to these data, a depressive patient has 17 times more chances of being detected in specialized care devices than in PC. Regarding treatment adequacy, the same study determined that a depressive patient has 8 times more possibilities to receive an adequate treatment in specialized care than in PC. Thus, there are significant differences between specialized care and PC in depressive disorder management, both related to detection and treatment adequacy.

IMPROVEMENT POSSIBILITIES OF DEPRESSION'S CARE IN PC: TOWARDS NEW TREATMENT MODELS

At the light of the exposed challenges, in the lasts decades several programs have been developed in order to improve attention care and treatment models. Among these proposals stand out the collaborative care models emerged from the United States and the stepped care models designed by the National Institute for Health and Care Excellence (NICE) in Europe.

Recently a shared approach-based model has been proposed in Spain³⁴. This model aims to stablish in PC a structured attention care system which integrate the actions developed by all sanitary professionals involved in depression care (PCP, psychiatrist, clinical psychologist and PC nurses). Achieving a coordinated performance of all professionals involved in depression management eases patient's comorbidity management, accessibility and care continuity (own of PC) while maintaining specialized care benefits. The core element of this model is the design of a clinical shared-approach plan considering patient's comprehensive health care (including both psychological and biomedical factors), patient's preferences and values, and the shared decision making between all involved professionals. However, this model it is not reduced to a simple professional coordination. It also stablishes the need to engage the empowered patient (and therefore his family and relatives) as an active part of the therapeutic team and the shared management.

The depression care shared approach-based models require high levels of coordination among professionals. To optimize professional coordination efforts, it is essential to establish common protocols and procedures, and clear definitions about shared activities and levels of responsibility assumed by each professional figure. It is also suggested to have quick, reliable and accessible protocols in matters of communication and information sharing.

In Spain, it has also been proposed a hierarchical model based in screening, diagnosis and referral³⁵. It is a three-stage stepped model in which clinical psychologist has a central role. This model has a first stage of quick detection through a computerized *Patient's Health Questionnaire* (PHQ-4)³⁶ administration. Those patients with a positive outcome in the first stage, go to a second screening stage consisting in the administration of a PHQ computerized version by a clinical psychologist. Finally, a clinical diagnostic confirmatory interview developed by a clinical psychologist take place in the PC center, and later, patient is referred to adequate care devices (both of PC and specialized care).

Several collaborative models are proposed in order to improve coordination between PC and specialized care, resulting in better care for depressed patients. A systematic review³⁷ analyzed and compared different mental health collaborative models, including those proposed outside Spain. The results exhibit that the efficacy of these models is generally low and questionable. Nonetheless, the great variability among these models and the consequent difficulty comparing them is highlighted. The authors suggest that the efficacy of these models could increase through redesigning management plans, taking professional responsibility in follow-ups and improving professional communication.

The generalized implantation of these emerging models in PC, may improve referral to effective treatments for common mental disorders

VARIABLES INVOLVED IN DEPRESSION MANAGEMENT IN PC

There exist some variables that influence the detection, diagnosis and treatment of depression. Attending these factors in dairy clinical practice should be a priority in order to improve depressive disorder care. In accordance to a 2015 review²³, these variables could be classified in four different categories:

Patient and disorder related factors

Reference of physical symptoms as main complaint and not referring psychological symptoms, are two of the main

factors that are associated with lower depression detection index^{18,38}. Both factors may respond to patient's difficulties to express their psychological discomfort with the PCP, especially when they think that depressive symptoms are not a reason to seek medical advice³⁹. It is also common to find patients who believe that PCP is not the appropriate professional to talk about these symptoms, nor with whom they should discuss their complaints. Young patients, high frequency patients and patients with higher psychiatric disability are less likely to express psychological symptoms⁴⁰. Also, patient's expectation about the possibilities of receiving help in PC can influence symptoms referral and satisfaction levels with the attention received. The lower the expectation, the lower the probability of symptoms referral²³.

A lack of mental disease in the past, lower psychopathology severity, absence of previous relationship with the PCP and being older, are also factors that are associated with lower depressive disorder detection and diagnose index. In contrast, referring psychological symptoms, higher functional impairment and long-term patient-PCP relationship are factors associated to a better detection. Having a previous history of depression, even though is associated to a higher detection, it is also associated to higher rate of false positives^{18,22,38}.

Among patient related factors, gender issue should be underlined. Depressive disorder presents extensive sexual differences⁴¹. Depression incidence is about twice in women than in men and they are at higher risk for lifetime prevalence and morbidity^{42,43}. In Spain, prevalence differences of depression between women and men are particularly high compared to similar countries. Nonetheless, there are no gender differences in seeking for treatment⁴⁴. Also, severe but atypical symptoms are more frequent in women than in men⁴⁵. Hence, gender factor should be considered to improve depression care models.

Problems related with PCP's training in mental health and in communication skills can negatively affect depression management. Lack of knowledge about the disorder and its proper management and low satisfaction with available treatments (mainly due to the low availability of psychological treatments), may reduce the ability and confidence of the PCP to successfully diagnose and treat depression⁴⁶. Similarly, those professional profiles with low psychosocial orientation may tend to downplay the assessment of a possible depression disorder⁴⁷. Similarly, some PCPs may fear legal conflicts derived from physical disease underdiagnoses and consequently overlook the assessment of a possible depression disorder.

Considering depression as a clinical condition may be controversial between PCPs⁴⁸, and there may be certain ten-

dency to not consider depression as an objective diagnostic category⁴⁹, especially when treating older patients. In these cases, PCP may deem depression as an spectrum shaped by loneliness, lack of social network and loss of functioning, and consequently as something comprehensible and justifiable. Because of this, some PCPs may be reluctant to assess depression in limited time consultation conditions. Instead, sometimes PCPs fall in "therapeutic nihilism", the perception that nothing can be done for those patients. Similarly, in socially depressed areas PCP may see depression as a normal response to adversity, diseases and vital circumstances, what finally leads to depression underdiagnose⁵⁰.

Care related factors

Regarding to health services related factors that difficult depression detection, it is necessary to highlight the lack of time in Primary care settings²⁵. Lack of time to explore and attend patient's demands, discontinuity in patient-PCP relationship and hard access to mental health services, increase PCP's reluctance to encourage patients to refer their depression symptoms. This makes depression disorder even more difficult to detect and manage⁵¹. Also, lack of time in consultation could make patients feel under pressure and inhibit them from manifesting depression symptoms⁵².

In regard to interventions aiming to improve depression care models, it's been observed that primary level interventions that include clinical practice with participation and support from mental health teams are more effective than treatment as usual and PCPs training interventions. Nonetheless this kind of interventions are more expensive⁵³. It is also been suggested to promote shared approach models aiming to integrate the performances of all mental health professionals and improve depression disorder care³⁴.

Socioeconomic factors

All these barriers usually are accentuated in low socio-economic stratum and minority populations, in addition to the fact that they tend to present more health problems and higher disability. These population sectors are frequently stigmatized, what makes even more difficult the depression management among them. In Spain, there exist studies that point unemployment as a depression risk factor^{19,54} and associate low education level with lower depression detection probability¹⁸. Similarly, ESEMeD data analysis showed that in Spain people with middle-low incomes are less likely to use health services in case of emotional disorder⁴⁴.

In low socioeconomic status populations, PC is often the only opportunity to receive psychological care, so that, consider the conditions of these people should be a key element in order to improve PC depression care models.

In the next figure are presented the main risk variables associated with lower success index in depression detection, diagnose and treatment:

Table 1	Risk variables involved in depression management
Patient and disorder factors	
Lack of psychological symptoms referral.	
Referral of physical symptoms as main complain.	
Low expectative about the possibilities of receiving help.	
Mental disease antecedents.	
Older age patients.	
Lower psychopathological severity	
Lack of previous relationship with PCP.	
Female sex.	
PCP factors	
Formative problems in mental health.	
Low communication skills.	
Low satisfaction with available treatments.	
Low psychosocial orientated professional profile.	
Fear of physical disease underdiagnose related litigations.	
Seeing depression as a normal response to adverse situation.	
Therapeutic nihilism.	
Healthcare factors	
Lack of time in consultation.	
Lack of participation and support of mental health teams.	
Lack of communication and coordination between different professional figures.	
Socio-economic factors	
Low socio-economic level and minority populations.	
Unemployment	
Low socio-educational level.	
Low income levels.	

STRENGTHS AND LIMITATIONS

This document offers an overview of depression care in the Spanish public healthcare system and enables its use as consultation document. This review provides actualized data about epidemiology, care and treatment of depression. It also offers some newfangled proposals in matter of depression healthcare. A non-systematic research in PubMed and

Scopus databases has been conducted, including all publications about depression care and treatment in Spanish public healthcare system published in the last 20 years. Nevertheless, the lack of specific criteria for the search and selection of articles are significant biases in this review. The absence of a systematic strategy prevents us to discard the existence of other relevant publications to build up this review. We consider that this work points out some of the current weaknesses of Spanish healthcare public system, and it frames those factors associated with a better depression management. However, due to briefness reasons, we have not exhaustively described all depression care collaborative models that exist nowadays. For those interested in a more detailed description on the subject, we recommend the review of Calderon-Gomez et al.³⁷.

NEW HORIZONS FOR IMPROVING DEPRESSION CARE: FINAL CONSIDERATIONS.

Once analyzed the depression care situation in Spanish PC and presented its main challenges and weakness, its necessary to frame some proposals in order to offer solutions for some of the problems discussed in this paper:

1. To dedicate greater efforts to unmet detection needs⁵⁵.
2. To bet and lay for implementation of collaborative depression care models⁵⁶.
3. To establish both universal and selective depression screening strategies in PC³⁴.
4. To dedicate greater resources to improve treatment adherence among patients⁵⁷.
5. To incorporate and spread among PCPs the NICE guidance recommendations related to physical activity programs implementation as an alternative treatment for low-moderate depression⁵⁸.
6. To take advantage and deeply explore the new possibilities that E-health technologies offer to us⁵⁹.
7. To decidedly insist in the application of depression prevention programs⁶⁰.
8. To promote the development of programs implementations studies in order to improve depression detection, diagnose and treatment⁶¹.

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