

Incidence in General Medicine of Anxiety and Depression (New Cases and Decompensations from Previous Cases) Related to the Covid-19 Pandemic During March-May 2020 in Toledo (Spain) and its Implications For Healthcare: Be Careful on How to Slice the Cake

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Abstract

Objective: To describe incidence of new cases and decompensations of previous cases of anxiety and depression and assess its characteristics and implications in health care.

Methodology: A retrospective and descriptive study was carried out on clinical and epidemiological variables, in new or known patients who got out of control, with anxiety or depression, and who consulted in general medicine office at a health center in Toledo, Spain, from March 1 to May 31, 2020.

Results: The "minimum incidence" (patients who consult the GP) of new cases of anxiety / depression or decompensation of previous stable ones, during the three months of greatest intensity of the COVID-19 outbreak in Toledo (Spain) was 2.3% inhabitants. These patients were mostly women, of middle age, predominantly with anxiety. 33% of the chronic diseases of these patients were mental disorders. Psychotropic drugs were prescribed or its doses were increased in a quarter of the patients. Only 4% presented COVID-19, and 11% reported contact with COVID-19. 17% were socio-health workers. About 50% required sick leave.

Conclusion: The incidence of new cases of anxiety/depression or decompensation of previous stable ones would imply that for Spain with 46,000,000 inhabitants there would be 1 million new patients in the period March-May 2020, and a third of them treated with psychotropic drugs. Caution should be exercised to creating more healthcare services that generate even more demand, and avoiding medicalization due to the exaggerated use of drugs.

Keywords: Coronavirus; COVID-19; SARS-CoV-2; Anxiety; Depression; Mental Disorders; General Practice; Epidemiology; Global Burden of Disease

Abbreviations: SARS-Cov-2: SARS-Coronavirus-2; PCR: Polymerase Chain Reaction; GP: General Practitioner.

Introduction

In December 2019, a cluster of pneumonia cases emerged

in Wuhan City, Hubei Province, China: coronavirus disease 2019 (COVID-19) which is caused by the SARS-coronavirus-2 (SARS-CoV-2), a primarily zoonotic virus. SARS-CoV-2 has spread affecting many countries and territories around the world after causing an initial COVID-19 outbreak in Wuhan, China [1]. WHO declared COVID-19 a global pandemic and a public health emergency. The spread of COVID-19 epidemic is unprecedented and it continues to spread [1-4]. Its figures are rapidly changing, and when this is written, as of July 28, 2020, the pandemic has infected more than 16.000.000 people and killed more than 600.000 worldwide; The United States has more than 4.000.000 cases, followed by more than 2.000.000 in Brazil, and 1.000.000 in India. Spain has more than 270,000, and ranks eleventh in the number of cases [2-5]. Spain reached the peak of the epidemic on March 26, 2020 when 9,181 infections were registered (based only on the cases detected by means of polymerase chain reaction (PCR) tests, which on that date were only performed on seriously ill patients in the hospital setting), eleven days after that the Government decreed a state of alarm to contain the spread of SARS-CoV-2. But, the community of Castilla-La Mancha (Spain) did not reach the peak until April 16, 2020, when it counted 846 cases [6].

COVID-19 is a traumatic event that the entire community is experiencing. Thus, there is likely to be a "substantial" increase in mental illness: anxiety and depression, substance use, loneliness, and domestic violence [7]. COVID-19 is a illness that scientists are trying to understand from many angles. But the pandemic and its associated stressors can have serious consequences for mental health. It is quite normal to experience distress as a result of chronic stress of this magnitude. Real losses (from loved ones, without the opportunity for a ritual funeral) or symbolic (graduation celebrations) abound. Isolation can lead to depression for many [8,9].

Due to the absence of a vaccine, control measures have been implemented to reduce the spread of COVID-19, such as restrictions on the movement of people, including social distancing, closing of business and parks, travel restrictions, quarantines, etc. This policy can have important health, economic, environmental, and social consequences. Stressors during this critical period include fear of infection, fear of death, uncertainty, loss of social contacts, confinement, inadequate information, conflicting advice, loss of outdoor activities, disconnection from nature, loneliness, depression, impotence, anger, low self-esteem, financial losses and obstacles to food and water supply [10]. Therefore, the COVID-19 outbreak is causing additional mental health problems such as stress, anxiety, depressive symptoms, insomnia, denial, anger and fear worldwide, which can generate more mental health services to address those needs worldwide [11].

For most illnesses the general practitioner (GP) is the first point of contact in the health care system and he looks after a population whose age and sex composition is known. The essence of general medicine is to assist individuals in families and communities, and this implies, on the one hand a good continuity of care, and moreover a knowledge of the nature of diseases in the community [12,13]. The GP is in a rare position that combines the individual and community dimensions. The "path of all patients" begins and ends with the GP [14,15]. All these characteristics of the GP can also be applied to the current outbreak of COVID-19.

In this scenario, this study aims to describe the incidence of new cases of anxiety and depression and stable previous decompensations in a general medicine practice, related to the phase of greatest intensity of the COVID-19 outbreak, and to extrapolate these data to large populations, evaluating and reflecting on their characteristics and implications in health care.

Material and Methods

A retrospective and descriptive study was carried out on clinical and epidemiological variables, in new or known patients who got out of control, with anxiety or depression, and who consulted in general medicine office at Santa Maria de Benquerencia Health Center, Toledo, Spain, which has a list of 2,000 patients> 14 years of age (in Spain, GPs care for people> = 14 years of age), from March 1 to May 31, 2020.

The following variables were collected:

- Diagnosis of mental health problems: anxiety, depression, insomnia, truncated mourning, treatment with antidepressants (or previous dose was increased). Diagnoses of mental health problems were made based on the V: Mental and behavioral disorders group of the WHO: Depressive episode (F32), Recurrent depressive disorder (F33), Persistent mood [affective] disorders (F34), other anxiety disorders (F41), and Reaction to severe stress, and adjustment disorders (F43) [16].
- Diagnosis of being sick with COVID-19, and contact communication with COVID-19 (the diagnosis of COVID-19 was made by PCR (oropharyngeal) or IgG and IgM serology for SARS-COV-2 (IgM positive and IgG positive or IgM negative and IgG positive). Because of, since the outbreak began, diagnostic tests were not available at the primary care level, since the instructions were as of March 18, 2020, that diagnostic test for SARS-CoV-2 be performed at people with a clinical picture of acute respiratory infection admitted to the hospital, or respiratory infection of any degree in health personnel. Similarly, routine diagnostic tests are not performed on

contacts [13,17]. And, since May 19, 2020, PCR began to be carried out on suspected COVID-19 cases in general medicine).

- Treatment with benzodiazepines, other psychological treatments
- Being a socio-sanitary worker
- Sick leave
- Chronic diseases (defined as "any alteration or deviation from normal that has one or more of the following characteristics: is permanent, leaves residual impairment, is caused by a non-reversible pathological alteration, requires special training of the patient for rehabilitation, and / or can be expected to require a long period of control, observation or treatment "[18], classified according to the International Statistical Classification of Diseases and Health-Related Problems, CD-10 Version: 2019 [16].

Inclusion criteria: Of course, the appearance of the COVID-19 outbreak with its risk, ignorance of the disease, quarantine, etc., produces an increase in the level of anxiety or emotional symptoms of various kinds, but only the cases in which the mental health symptoms presented an entity sufficiently intense for the patient to motivate them to consult the GP, and that the GP considered them as an independent problem that required their own attention. It is important to understand anxiety as a feeling or a normal emotional state in certain stressful situations. Thus, a certain degree of anxiety is even desirable for the normal handling of dayto-day demands. Only when it exceeds certain intensity or exceeds the adaptive capacity of the person, is when anxiety becomes pathological, causing significant discomfort with symptoms that affect both the physical, psychological and behavioral levels.

Results

46 patients were included for presenting new symptoms of mental disorder or decompensation or aggravation of previously stable or controlled mental problems; 13 males and 33 (72%) females, with a mean age of 49 years and range of 18-88 years. 42 cases presented anxiety (91%), 3 depression (6%); 8 insomnia (17%); and 3 truncated grief (6%). Antidepressant treatment (or previous dose increase) was performed in 6 cases (13%), benzodiazepines were used in 8 cases (17%), and other treatments (antipsychotics, antihistamines, consultation with a psychologist) in 3 cases (6%) (Table 1).

The 46 cases included, 2 (4%) presented COVID-19, and 5 reported contact with COVID-19 (11%). 8 were sociohealth workers (17%). 19 required sick leave (41%).

Clinical-Epidemiological Characteristics (n=46)	Number Of Cases (Percentage)
Anxiety	42 (91%)
Depression	3 (6%)
Insomnia	8 (17%)
Truncated mourning	3 (6%)
Antidepressant treatment (or increased previous dose)	6 (13%)
Benzodiazepine treatment	8 (17%)
Other treatments (antipsychotics, antihistamines, consultation with a psychologist)	3 (6%)
Sick with COVID-19	2 (4%)
Communicated contact with COVID-19	5 (11%)
Socio-health workers	8 (17%)
sick leave	19 (41%)

Table 1: Clinical-Epidemiological Characteristics of theCases Included in the Study.

Regarding number of chronic diseases according to WHO, ICD-10 groups in patients with mental disorders related to the covid-19 pandemic during march-May 2020 in Toledo (Spain) covid-19, compensated previous mental disorders (depression / anxiety) predominated), respiratory and circulatory system diseases (Table 2).

Diseases According To Who, Icd-10 Groups	Number of Chronic Diseases in Patients with Covid-19 N=43 chronic diseases () indicates %
-II Neoplasms	2 (5)
-IV Endocrine	4 (9)
-V Mental	14 (33)
-VI-VIII Nervous and Senses	1 (2)
-IX Circulatory system	6 (14)
-X Respiratory system	9 (21)
-XI Digestive system	1 (2)
-XII Diseases of the skin	2 (5)
-XIII Musculo-skeletal	1 (2)
-XIV Genitourinary	3 (7)

Table 2: Number Of Chronic Diseases According To Who, Icd-10 Groups In Patients With Mental Disorders Related To The Covid-19 Pandemic During March-May 2020 In Toledo (Spain) Covid-19.

The "minimum incidence" (patients who consult the GP) of new cases of anxiety/depression or decompensations of previous stable ones, during the three months of greatest intensity of the COVID-19 outbreak in Toledo (Spain) was 2.3% inhabitants. Taking into account that patients with mental disorders consult mainly in the first level of care, due to the rapid access and longitudinality of care, this number of cases of anxiety / depression in the GP consultation can be extrapolated, as incidence minimum, to general population [19-22].

Discussion

Prevalence/Incidence of anxiety and mental health workloads before COVID-19

Anxiety disorders and depressive disorders are highly prevalent conditions that frequently co-occur. According to large population-based surveys, up to 34% of the population is affected by an anxiety disorder during their lifetime [23]. The prevalence of anxiety disorders from 87 studies across 44 countries ranged between 1% and 28%, and pastyear prevalence between 2% and 30%. The global current prevalence of anxiety disorders adjusted for methodological differences was 7% (4.8-10.9%) and ranged from 5% (3.5-8.1%) in African cultures to 10% (7.0–15.5%) in Euro/Anglo cultures [24]. On the other hand, depression is also a common mental disorder. Globally, more than 264 million people of all ages suffer from depression [25]. The lifetime prevalence of anxiety disorders and major depression among adults in the United States has been reported to be 29% and 17%, respectively [26]. In Spain, most studies place the prevalence of mental illness, in general population, between 10%-20% [27,28]. Other important information is that it is admitted that the frequency of mental illness is higher in women (21%) than in men (14%) [29], and that women are more at risk than men of having an anxiety disorder [29,30].

COVID-19 pandemic represents an impending crisis for mental health and the health care systems that serve them

The larger the scale of the outbreak, the greater the impact and the greater the fear and psychological involvement, as has been shown in previous epidemics: since Ebola virus disease and bird flu, epidemics are known to lead to mental and behavioral health disorders [9]. Throughout history, there have been many epidemics; In the past two decades, many countries have faced challenges in the face of major infectious disease epidemics, including SARS-CoV-1, swine flu (H1N1), Middle East airways, coronavirus syndrome (MERS- CoV), avian influenza (H7N9), Ebola virus, etc., and may require communities to introduce restrictive public health measures such as isolation, mass quarantine, and

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community containment interventions to stop transmission and save lives [31,32], but the human response to COVID-19 is unprecedented. The world will never be the same again. It is estimated that nearly 4 million people lived in social isolation in April 2020. So, the cumulative impacts of social distancing will be truly profound [10,11]. Furthermore, the effects of outbreaks of any significant magnitude can be multiple, but their effect on the psyche can be profound and long-lasting; these include a potential to exacerbate existing illnesses or precipitate new mental illnesses [33,34]. Thus, anxiety and fear are normal reactions to generalized infections like COVID-19 [35].

The repercussions on mental health in people due to the COVID-19 pandemic are probably multidetermined but not random. These include their pre-pandemic circumstances and resources (pre-adversity exposures, physical and mental health vulnerabilities, and economic and social supports), and the exposures found during the pandemic (affectation of family members, labor problems, living in a "hot spot", quarantine, closing of shops and restaurants) [8]. The changes brought about by the pandemic and its effects on health workers and the community at large, especially vulnerable groups, can lead to a large volume of mental health problems [36-42].

Incidence/prevalence of new or worsening cases of anxiety or depression related to COVID-19

A first element of difficulty for comparing the results is the use of diagnostic instruments (interviews, questionnaires, online, etc.) that are not always clear and standardized, and that their criteria may also vary between countries and cultures [43]. A survey reported that 80% of people with ongoing mental health problems report a worsening of their condition and many feel less supported due to necessary changes in service [44]. In a quantitative study that provided prevalence rates of mental problems in adults (\geq 18 years) during and after epidemic outbreaks (SARS-CoV-1, Ebola virus, MERS-CoV and SARS-CoV-2, H1N1 and H7N9) reported extensive variations both for the general population and for the different epidemics, with figures of anxiety of 1-47%, of depression of 1-32%, and any symptom of anxiety / depression combined of 49%. The majority of studies were cross-sectional in design, and only about half of the studies used representative samples [43]. These method variations make it difficult to estimate the magnitude and associated characteristics. In a systematic review and metaanalysis of articles focused on anxiety and depression among the general population during the COVID-19 pandemic, a prevalence of anxiety of 32% and depression of 34% has been reported.

Our study, for patients who consult the GP, shows incidence figures in the critical period of COVID-19 outbreak, for anxiety or depression of 2.3%, which is in the lower range, or it is clearly less, than of the published figures. But, in our study, we would have to speak of "minimal incidence" of anxiety and depression (since it can be thought that despite full accessibility to GP, some patient did not consult despite presenting symptoms or did so to a different health provider from his GP). Despite the relatively small figure of 2.3%, projections of this figure imply that, for the neighborhood attended by the Health Center where the study was conducted, with a population of 20,000 inhabitants, there will be 450 patients with new mental health problems in relation to COVID-19; In Toledo (one of the provinces of Castilla La Mancha) with 700,000 inhabitants, there will be 16,000 new patients, for Castilla La Mancha with 2,000,000 inhabitants, 46,000 new patients, and for Spain with 46,000,000 there would be 1 million new patients in the March-May 2020 period. Most will not need to see specialists, but will need to feel supported and heard. But some will need mental health services [42]. This situation of great increase in workload due to anxiety/depression, together with the fact that consultations can be closed [46], the long waiting list for appointments before and after COVID-19, and the use of telecare, can induce biomedical responses and inadequate psychotropic prescriptions; All of these can generating cascades of adverse events (adverse drug reactions, drugdrug interactions, drug dependence, and the problem of changes in thoughts, emotions and behaviors that generate passivity in the patient and ultimately chronify the symptoms, as a consequence of the treatment with psychotropic drugs) [47,48].

It has been reported that a higher level of exposure to the epidemic (for example, proximity of life to the epidemic epicenter, contact history with high prevalence regions), hospitalization during an epidemic, being in quarantine, or having infected family members, can be risk factors for mental problems. Other risk factors include being a woman (72% were women in our study), chronic diseases (in our study, mental disorders, respiratory and circulatory system diseases predominated) (Table 2), and financial problems [43]. A study carried out on a sample of more than 2,000 people in Spain, during the first week of confinement, between March 15 and 2, 2020, showed that a high number of people experienced symptoms of anxiety [49]. The higher levels of anxiety and depression are not only an expected consequence of the COVID-19 pandemic, prolonged confinements and economic concern, but could also be a factor conspiring against the maintenance of social distancing and other measures of public health necessary to avoid an overflow of cases [50].

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Psychiatric Symptoms Associated with COVID-19

Only 2 patients with COVID-19 (4%) who presented anxiety/depression were included in our study. Although studies related to mental health in patients with COVID-19 are scarce [11]. Symptoms of depression, anxiety, fatigue, and post-traumatic stress disorder were common in the post-illness phases of MERS and SARS, but there are not enough data yet on COVID-19. Patients with COVID-19 in the hospital setting may develop psychosis, altered mental status, and dementia-like syndrome, delirium, posttraumatic stress disorder, anxiety, and depression [51,52]. It must be remembered that our study refers to the extrahospital setting in general medicine consultation.

Anxiety/Depression in Socio-Health Personnel

The COVID-19 pandemic is creating a huge healthcare burden with millions of cases and thousands of deaths, in hospitals and nursing homes. Frontline professionals are exposed to long work shifts, poor personal protective equipment, fear of being infected and infecting family members, and there is significant existential stress associated with the loss of many patients, colleagues or loved ones every day [53]. We found that 17% of patients with new symptoms or de-compensation of anxiety / depression were socio-health workers.

Insomnia and Truncated Grief

Under the influence of the COVID-19, the sleep status of patients with chronic insomnia is affected by the epidemic [54]. Sleep disturbances are accompanying symptoms of anxiety and depression. It has been stated that many people have reported alterations in sleep patterns during lockdown, mainly in the form of nightmares and insomnia, and everything indicates that in the medium and long term they will foreseeably last over time [55]. In our study, 17% of the included patients had insomnia. Another important issue is the isolation arrangement for dying patients that prohibits close family or friends from saying 'goodbye' to their loved ones. We found 3 patients (6%) with truncated grief [53]. Managing these unsolved duels can be challenging in primary care practices. The special circumstances surrounding the deaths will leave an indelible and lasting imprint on the relatives, and post-traumatic stress symptoms will probably appear and will manifest themselves in full after three months of death [55].

Treatment with Psychotropic Drugs

In our study, 33% of patients with newly diagnosed or previously decompensated anxiety/depression received or

increased doses of psychotropic drugs. It has been reported that there has been an increase in the demand for anxiolytic drugs by patients, and even many doctors have increased their prescription as a preventive measure. However, thinking about systematic treatment with psychotropic drugs in all of this post-pandemic emotional pathology would be a profound mistake that should be avoided [54] as it can generating cascades of adverse events [47, 48, 56-57].

Limitations and Strengths of the Study

- The study focuses on the three months with the highest incidence of the COVID-19 outbreak in the community, and thus, some anxiety and depression reactions may respond to the acute stress situation and be only transitory. The study does not investigate whether these emerging COVID-19-related anxiety / depression problems can become lasting health problems.
- The relatively short time of the study (three months) probably does not include the appearance or decompensation of anxiety or depression problems that overlap with other problems that need more time to be a reason for consultation in general medicine (although they were not the object of the study, these problems could initially have been shown as anxiety / depression in the general medicine consultation): this could occur with disorders due to drug addictions (cocaine, amphetamines, etc.) and alcohol, pathological gambling, psychosis, and post-traumatic stress syndrome.
- However, the study has the strength of having a simple and useful methodology, allowing showing the general from the particular.

Conclusions and Implications in Public Health, and Planning and Management of Sanitary Services

- Anxiety prevailed vs. depression, in middle-aged women, without COVID-19; almost a quarter of them being socio-health workers, almost half required sick leave, and a third of the patients were treated (or the doses were increased) with psychotropic drugs. Regarding the chronic diseases of these patients, compensated previous mental disorders, respiratory and circulatory system diseases predominate.
- The "minimal" incidence found in our study of 2.3%, although probably in the low range of the published figures, implies a significant burden of patients with anxiety/depression related to COVID-19 to be treated in general medicine and in services of mental health . Furthermore, the widespread reduction of in-person mental health services available and the wide limitations on mobility as a result of the public health measures enacted will further complicate the care of these patients.

In this context, there is a risk of indiscriminately increasing the offer of mental health services, and of giving a biomedical response based on treatment with psychotropic drugs, which in the medium term will probably increase the problem: supply increases demand, the indiscriminate use of psychotropic drugs increases adverse reactions to drugs and drug-drug interactions; it originates dependency, passivity of the patient, etc. Consequently, it is proposed that before making major healthcare changes, be careful not to spoil what you have, and in any case, move forward taking into account the central role of primary care and GP. Changes towards preferential care for patients with anxiety / depression related to COVID-19 could produce an opposite effect to that desired, such as an increase in the prescription of psychotropic drugs, visits to the emergency department, hospital admissions and costs without a clear benefit for patients. Before adopting important modifications in the health care of this workload, one must be careful "on how to slice the cake", defining and characterizing the different subgroups, to decide what type of interventions and about what kind of people may be beneficial, considering scientific evidence that supports them, and also the conflicts of interest of those who propose them (Figure 1). So, there will be no one-size-fits-all response to this anxiety/depression crisis related with COVID-19.



Figure 1: Be Careful To Slice the Cake of Patients with Anxiety / Depression Related To Covid-19: Defining and Characterizing Subgroups That Benefit From Interventions.

References

 Li Q, Guan X, Wu P, Wang X, Zhou L, et al. (2020) Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med 382(13):1199-1207.

- 2. Gupta SD (2020) Coronavirus Pandemic: A Serious Threat to Humanity. J Health Manag 22(1): 1-2.
- 3. Zhu N, Zhang D, Wang W, Li X, Yang B, et al. (2020) A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med 382(8): 727-733.
- 4. García-Basteiro AL, Chaccour C, Guinovart C, Anna Llupià, Joe Brewet al. (2020) Monitoring the COVID-19 epidemic in the context of widespread local transmission. Lancet Respir Med 8(5): 440-442.
- 5. Mackenzie JS, Smith DW (2020) COVID-19-A Novel Zoonotic Disease: A Review of the Disease, the Virus, and Public Health Measures. Asia Pacific Journal of Public Health 32(4): 145-153.
- 6. Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins. The Center for Systems Science and Engineering (CSSE) at JHU.
- 7. Flores D (2020) Coronavirus. Spain reached the peak of the epidemic on March 26, eleven days after declaring the state of alarm. Rtve.
- 8. Brooks M (2020) COVID-19: Mental Illness the 'Inevitable' Next Pandemic?. Medscape.
- 9. Silver RC (2020) Surviving the trauma of COVID-19. Science 369 (6499): 1-11.
- 10. Turabian JL (2020) Implications on mental health by the coronavirus disease 2019 (COVID-19) pandemic: The role of general practitioner. Arch Psychiatr Ment Health 4: 035-041.
- 11. Matias T, Dominski FH, Marks DF (2020) Human needs in COVID-19 isolation. J Health Psychol 25(7): 871-882.
- 12. Torales J, O'Higgins M, Castaldelli-Maia JM, Ventriglio A (2020) The outbreak of COVID-19 coronavirus and its impact on global mental health. Int J Soc Psychiatry 66(4): 317-320.
- 13. Turabian JL (2017) The Variation of Seasonal Diseases in Family Medicine Depends on Infectious Diseases and these are Mainly Respiratory Diseases. J Gen Pract (Los Angel) 5(3): 1-6.
- 14. Turabian JL (2020) Micro-Impact of the Pandemic by Covid-19 in the General Medicine: Clinical and Epidemiological Reflections from the Situation in Spain March 2020. Epidemol Int J 4(2): 1-11.
- 15. Turabian JL (2017) Prevalence of Chronic Diseases: in Defence of Epidemiological Craftsmanship in Family

Medicine. CP Epidemiology 1(1): 005.

- 16. Turabian JL (1995) Notebooks of Family and Community Medicine. An introduction to the principles of Family Medicine.
- 17. (2019) International Statistical Classification of Diseases and Health-Related Problems. ICD-10 Version. WHO.
- 18. Hamed E, Abd Elhamid M, Alemrayat B (2020) Suspected cases of COVID-19: study protocol for reporting characteristics and the outcomes. Fam Med Community Health 8(2): 1-4.
- 19. Strauss AL (1984) Chronic illness and the quality of life. St Louis: The C.V. Mosby Company.
- Ormel J, Vonkorff M, Tevfik U, Pini S, Korten A, et al. (1994) Common mental disorders and disability across cultures. Results from the WHO collaborative study on psychological problems in general health care. JAMA 272(22): 1741-1748.
- Kroenke K, Spitzer RL, Williams JB, Monahan PO, Löwe B (2007) Anxiety disorders in primary care: prevalence, impairment, comorbidity and detection. Ann Intern Med 146(5): 317-325.
- 22. Roy-Byrne PP (1996) Generalized anxiety and mixed anxiety-depression: association with disability and health care utilization. J Clin Psychiatry 57(7): 86-91.
- 23. Latorre Postigo JM, Hidalgo JLT, Rodríguez JM, Delgado MP (2005) Mental Health Perceived Demand and Training Necessities of Primary Care Physicians. Aten Primaria 36(2): 85-92.
- 24. Bandelow B, Michaelis S (2015) Epidemiology of anxiety disorders in the 21st century. Dialogues Clin Neurosci 17(3): 327-335.
- 25. Baxter AJ, Scott K, Vos T, Whiteford H (2013) Global prevalence of anxiety disorders: A systematic review and meta-regression. Psychol Med 43(5): 897-910.
- 26. (2020) Depression. WHO.
- 27. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, et al. (2005) Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 62(6): 593-602.
- 28. Pérez CM, García RP, Herrero Martín JJ, Castillo JL, García PR, et al. (2003) Prevalence of psychiatric pathology at a rural health centre. Aten Primaria 31(1): 39-46.

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- 29. Bentata LC, Franch JV, Rodríguez IL, Auquer K, Franch L (1995) Prevalence of Psychopathology at a Primary Care Center. Aten Primaria 16(10): 586-593.
- 30. The European Opinion Research Group (2003) The Mental Health Status of the European Population.
- 31. Somers JM, Goldner EM, Waraich P, Hsu L (2006) Prevalence and Incidence Studies of Anxiety Disorders: A Systematic Review of the Literature. Can J Psychiatry 51(2): 100-113.
- Reperant LA, Osterhaus ADME (2017) AIDS, Avian flu, SARS, MERS, Ebola, Zika... what next?. Vaccine 35(35): 4470-4474.
- 33. Wilder-Smith A, Freedman DO (2020) Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. Journal of Travel Medicine 27(2).
- 34. Vega CP, Nyarko E (2020) How Is COVID-19 Affecting HCP Emotional and Mental Health?. Medscape.
- 35. Moukaddam N (2019) Fears, outbreaks, and pandemics: lessons learned. Psychiatr Times.
- 36. (2019) Emergency preparedness and response: Taking care of your emotional health. CDC.
- 37. Adams JG, Walls RM (2020) Supporting the health care workforce during the COVID-19 global epidemic. JAMA.
- Benjet C, Bromet E, Karam EG, Kessleret RC, McLaughlin KA, al. (2016) The epidemiology of traumatic event exposure worldwide: Results from the World Mental Health Survey Consortium. Psychol Med 46(2): 327-343.
- 39. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, et al. (2020) The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. Lancet 395(10227): 912-920.
- 40. Cook T, Kursumovic E, Lennane S (2020) Exclusive: Deaths of NHS staff from Covid-19 analysed. Health Service Journal.
- 41. Khunti K, Singh AK, Pareek M, Hanif W (2020) Is ethnicity linked to incidence or outcomes of Covid-19?. BMJ 369: 1548.
- 42. United Nations (2020) UN chief calls for domestic violence 'ceasefire' amid 'horrifying global surge'. UN News.
- 43. Molodynski A, McLellan A, Craig T, Bhugra D (2020)

What does COVID mean for UK mental health care?. Int J Soc Psychiatry.

- 44. Zuercher SJ, Kerksieck P, Adamus C, Burr C, Lehmann AI, et al. (2020) Prevalence of Mental Health Problems During Virus Epidemics in the General Public, Health Care Workers and Survivors: A Rapid Review of the Evidence. MedRxiv.
- 45. (2020) 80% of people living with mental illness say current crisis has made their mental health worse. Rethink Mental Illness.
- 46. Salari N, Far AH, Jalali R, Raygani AV, Rasoulpoor S, et al. (2020) Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. Globalization and Health 16: 57.
- 47. Anderson P (2020) COVID-19: Psychiatric Patients May Be Among the Hardest Hit. Medscape.
- 48. Hemmersley D (1995) Counselling people on prescribed drugs. SAGE Publications.
- 49. Turabian JL (2019) Suggestions to Address the Increase in Demand and Costs in General Medicine: Escaping From a "Black Hole" and from Boomerang Effect. J Qual Healthcare Eco 2(3): 1-9.
- Rodríguez-Muñoz A, Antino M, Ruíz-Zorrila P, Sanz-Vergel A (2020) The psychological effects of COVID-19 quarantine: A longitudinal study. Research project in progress. Universidad Complutense de Madrid.
- 51. Loewy MA (2020) COVID-19: Can anxiety, depression, anger and addictions "boycott" social distancing?. Medscape.
- 52. Rogers JP, Chesney E, Oliver D, Pollak TA, McGuire P, et al. (2020) Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: a systematic review and meta-analysis with comparison to the COVID-19 pandemic. Lancet Psychiatry 7(7): 611-627.
- 53. Brooks M (2020) COVID-19 Tied to Wide Range of Neuropsychiatric Complications. Medscape.
- 54. Zaka A, Shamloo SE, Fiorente P, Tafuri A (2020) COVID-19 pandemic as a watershed moment: A call for systematic psychological health care for frontline medical staff. J Health Psychol 25(7): 883-887.
- 55. Yang L, Yu Z, Xu Y, Liu W, Liu L, et al. (2020) Mental status of patients with chronic insomnia in China during COVID-19 epidemic. Int J Soc Psychiatry 66(8): 821-826.

- 56. Martínez CN (2020) Unresolved mournings, cabin syndrome and sleep disturbances, main challenges post COVID-19 in mental health. Medscape.
- 57. Doblyte S (2020) Under-or Overtreatment of Mental Distress? Practices, Consequences, and Resistance in the Field of Mental Health Care. Qualitative Health Research 30(10): 1503-1516.



Turabian JL. Incidence in General Medicine of Anxiety and Depression (New Cases and Decompensations from Previous Cases) Related to the Covid-19 Pandemic During March-May 2020 in Toledo (Spain) and its Implications For Healthcare: Be Careful on How to Slice the Cake. Epidemol Int J 2020, 4(S2): 000S2-007.