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REVIEW ARTICLE

Beliefs about depression and its treatments: Associated variables and the influence of beliefs on adherence to treatment☆

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Abstract Beliefs and attitudes about treatment in patients with depression are significant factors related to treatment adherence. Despite their importance, few studies have evaluated the determining factors of these beliefs, and the positive or negative attitudes towards treatment. This review looks at areas such as, adherence to antidepressants and psychotherapy, influence of beliefs and attitudes on adherence to treatment, beliefs and attitudes about depression and its treatment, their assessment, variables associated with these beliefs, and limitations of available studies. Acknowledging the importance of patient beliefs about depression and treatment, and their assessment are essential to optimize the chances of success of therapy by identifying and addressing misconceptions, prejudices and negative attitudes, as well as the consideration of these aspects in order to improve treatment choice.

PALABRAS CLAVE
Creencias;
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Creencias sobre la depresión y sus tratamientos: variables asociadas e influencia de las creencias en la adherencia

Resumen Las creencias y actitudes frente al tratamiento en los pacientes con depresión son factores de incuestionable importancia para la adherencia al tratamiento. A pesar de su importancia, aún existen pocos estudios que hayan evaluado los factores determinantes de las creencias y actitudes negativas o positivas frente al tratamiento. En esta revisión se abordan las áreas de la adherencia al tratamiento antidepresivo y a la psicoterapia, la influencia de las creencias y actitudes frente al tratamiento sobre la adherencia, las creencias y actitudes frente a la depresión y sus tratamientos, su evaluación, las variables relacionadas con estas creencias, y las limitaciones de los estudios disponibles. La consideración y evaluación de las creencias de los pacientes respecto a la depresión y los tratamientos es esencial para

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optimizar las posibilidades de éxito de la terapia mediante la identificación y abordaje de concepciones erróneas, prejuicios y actitudes negativas, así como la consideración de estos aspectos en la elección del tratamiento.

Introduction

Depression is one of the most prevalent and disabling mental disorders in the general population, with substantial consequences at the individual, family and socioeconomic levels. Adherence to treatment is a key factor in recovery for more favourable clinical results later.[1,2] For their part, one's beliefs about depression and treatment (both psychopharmacological and psychotherapeutic) have been considered as the main variables associated with adherence to antidepressant treatment. In turn, there are multiple determining factors for these beliefs, including sociodemographic and cultural factors and those about the illness itself, among others.[3]

This review addresses the areas of adherence to antidepressant treatment and psychotherapy, the influence that beliefs and attitudes towards treatment have on adherence, beliefs and attitudes towards depression, psychopharmacological treatment and psychotherapy, as well as its evaluation and limitations in the studies available. It also identifies the most relevant findings of the variables related to these beliefs, although not as an independent section.

Adherence to antidepressant treatment

It has been estimated that non-adherence to antidepressant medication oscillates between 30% and 60%.[4] Among its consequences are increased rate of relapses and recurrences.[1,2] Despite the fact that 49–84% of the patients perceive the need for antidepressant treatment,[3] 1/3 abandon treatment 3 months after feeling better.[5] At 6 months, the rate of non-adherence reaches 55%.[6] Strikingly, only 1–2% of publications dedicated to the treatment of affective disorders explore the factors associated with non-adherence to medication.[7]

Non-adherence is a multifactorial phenomenon. The risk factors have been grouped into several categories: those related to the patient, illness, medication, medical and health care, and family and society.[8] The most established factors have been the patient's attitudes and beliefs about health (including the stigma attached to depression), the patient's and family's attitudes and beliefs about depression and medication, a poor doctor–patient or psychotherapist–patient relationship and previous non-adherence. Other factors mentioned are side effects of the medication, lower education and economic level (especially in the early stages of treatment), not being married, depression itself, forgetfulness, certain personality traits, substance abuse, medical comorbidity and somatoform symptoms.[7,8] Psychoeducation[9] and decision-making in conjunction with the patient[10] are relevant factors for improving adherence. For its part, employment has been associated with a larger social network and a better attitude towards drug treatment and adherence to it.[11]

Both the degree of non-adherence and the risk factors may vary according to the evolutionary moment. Early discontinuation is associated with secondary effects and the perception of medication as ineffective. Patients in the maintenance phase (by definition they are less depressed) reduce their adherence with clinical improvement. Furthermore, they tend to believe that they do not need medication any more or they are less willing to continue tolerating the previously acceptable adverse effects, such as sexual dysfunction.[12] For its part, adherence is greater in cases of more severe symptoms, while it predisposes patients not to start treatment in milder cases.[13]

Adherence to psychotherapy

Non-adherence is a prevalent phenomenon in the psychotherapeutic process.[14] According to meta-analysis, it falls between 35%[15] and 47%[14] and may exceed 60% when non-attendance to the first contact appointment is evaluated.[16,17] In other studies, only 11% completed therapy[18] and only 10% reached the tenth session.[19] Non-adherence occurs in all disorders, treatment programmes and therapy types and formats.[20]

There are very few studies evaluating adherence in psychotherapy.[7] Therefore, there are barely any studies on depression[21] and most have focused on socio-demographic characteristics.

Findings on risk factors for non-adherence have been inconclusive. Multiple factors have been encompassed in several areas: patient, therapeutic relationship, context, type of psychotherapy and expectations for therapy.[22] However, there is unanimity that the therapeutic relationship, and especially the therapeutic alliance, is a fundamental aspect for adherence; it is also essential, although not itself curative, for the success of psychotherapy.[23,24]

How beliefs and attitudes towards treatment influence adherence

Negative beliefs about medication[7] and illness[25] are an important factor for non-adherence. Positive attitudes regarding antidepressants are associated with more active use of mental health services.[26] A positive attitude towards drug therapy was the main predictor of adherence in a prospective study.[27] In patients with depression, specific beliefs (such as ''my health depends on antidepressants'') and less concern about being dependent on this medication

have been strongly associated with adherence. Beliefs that drugs cause pain that they are over-prescribed the experience of adverse effects and greater severity of depression were associated with poor adherence.[28] The main negative belief found consistently regarding antidepressants was the belief that they can cause addiction.[3] Other authors did not find an association between the belief that treatment is necessary and better adherence, but an association was found between concern about the medication and non-adherence.[29] Positive attitudes towards antidepressants have been associated with the use of antidepressants, with patient education about antidepressants being a mediating variable between the 2.[30] In this vein, increased adherence was found in clinical trials in patients receiving advice on treatment, compared to those who did not.[31] Furthermore, positive changes in beliefs about antidepressants have been found in patients who received an intervention programme that included psychoeducation about antidepressant treatment vs the standard systematic follow-up.[32] Patients with greater knowledge on depression and antidepressants and lower perceived stigma adhered better to treatment.[33] One of the difficulties in studying stigma and its influence on adherence is differentiating between the stigma associated with antidepressant treatment and that related to depression.[34] The following beliefs have been identified as components of the stigma in patients with depression: that others think the person to be responsible for suffering depression that being near people with depression is not desirable and that these people might constitute a danger.[35]

Different models have attempted to give coherent explanatory support to the complex interactions among the various factors involved.

Horne's theoretical model distinguishes between beliefs about medication in general and beliefs about what is specifically prescribed. The latter includes 2 constructs: perceived need for medication (necessity) and perceived potential for medication to cause problems (concern).[36] Beliefs about medication in general seem to be most relevant for adherence at the start of treatment.[37] In this acute phase, changes in beliefs about antidepressants occur. Perceptions become more pro-adherence as patients continue to have experience with the treatment; perception of the need for treatment increases and that of harmful potential of drugs weakens. Beliefs in the danger of antidepressants predict the later appearance of side effects, while the occurrence of side effects reinforces the belief of danger.[38] In the maintenance phase, the different degrees of adherence are explained by the balance between the perceptions of need and potential harm; adherence is lower when the perceived harm exceeds the perceived need, and higher when the perceived need exceeds the perceived harm.[12]

The *Health Belief Model* postulates that the main determinants of the search for treatment and adherence are beliefs about susceptibility to a health problem and its severity, treatment effectiveness, benefits perceived and treatment barriers.[39] Such beliefs may be especially important in mental disorders, which are often stigmatized and not well understood.[40] Adherence is correlated with the patient's beliefs about the severity of the disease to be treated or prevented.[25] Four states of subjective positioning have been identified according to the ''perceived need'' and ''perception of harm'' in depressed patients: *sceptical* (those that consider the need for treatment to be low and have high concern for harm related to treatment), *ambivalent* (those that perceive high need and worry), *indifferent* (those that assess both the need and concern about harm to be low) and *accepting* (those that perceive a high necessity and low worry).[12]

Beliefs and attitudes towards depression, medication and psychotherapy

Beliefs about depression

The areas studied have been the aetiology of depression, the usefulness of treatments, the search for help and the perceived stigma. Beliefs about the causes of depression are mostly non-biological, psychological or environmental.[3] However, while the general population and patients affected by milder depressive disorders refer to causes or external factors (reactive to interpersonal difficulties and stress), the more serious patients tend to allude to a biological aetiology and put more trust in drug treatment. For their part, people who suffer from depression tend to have more positive beliefs about treatment than do healthy people.[3] The most commonly mentioned causes of depression were stress associated with work, followed by personality and family situation, with only 3.6% of the respondents giving biological reasons.[41] However, evolution of beliefs about illness origin has been observed in recent years (1996-2006), the change being directed towards a more biomedical framework. These changes could be justified according to television campaigns with reference to depression; they could also be due to client-directed marketing by pharmaceutical companies in the United States.[42]

Up to 2/3 of those surveyed in Spain considered depression to be an illness, while the rest considered it a state of mind. Of the same sample, 80% considered it a psychological or mental illness. Furthermore, the respondents unanimously considered depression to be chronic. The causes most frequently indicated were labour, family and economic problems, stress, loss of a loved one and loneliness, confusing triggers with causes.[43]

Beliefs about depression are factors associated with requesting professional help. The stigma associated with depression is frequent[44]; the beliefs that it is a stigmatizing condition and that one should be able to control one's own depressive state are associated with concealing symptoms from the doctor.[45] The most vulnerable groups would be those of extreme age categories (young people and the elderly), given the lower perception of illness and the attribution of difficulties to ''normalised'' life phases of the individual. This belief extends even to primary health care doctors, among whom difficulties have been identified for establishing treatment for these groups.[46]

Beliefs about the causes of depression influence patients' treatment preferences, as well as their assignment to 1 type of treatment or another. The preference for psychotherapy is associated with attribution of the aetiology to problems in childhood and to more complex aetiologies, compared to patients who prefer drug treatment.[47] Attribution to intra-individual causes is associated with assignment to cognitive behaviour therapy, while attribution to biological causes is

associated with psychopharmacological treatment.[48] Beliefs in biomedical causes of depression are associated strongly with preference for antidepressant treatment.[49] For its part, a belief in non-medical models would interfere with standard biomedical treatment, which would be rejected as of little use or even harmful.[50]

Beliefs about antidepressants

The main negative beliefs about antidepressants are addictive possibilities (especially in males), over-medication and prescription abuse of antidepressants.[51]

More than 2/3 of the population surveyed in Spain demonstrated beliefs regarding dependency caused by antidepressants, with this being the main adverse effect alleged as the reason for discontinuing the drugs after a short time.[43] Similar findings were obtained in older, 60-year-old depressed patients, with negative attitudes towards the treatment. The 2 main reasons for resistance to taking antidepressants were fear of dependence and resistance to seeing depressive symptoms as a medical illness.[52] Adolescents preferred psychotherapy over drugs, and the main adverse effects that would make adherence to antidepressant treatment difficult for them were the increase of weight for girls and the sexual effects for boys.[53] Patients with major depressive disorder appeared to have a more negative view of antidepressants than those with bipolar disorder.[54]

Based on Horne's model, it has been found that the *need* for antidepressant treatment is associated with older age, greater severity of depressive symptoms, expecting a longer duration of symptoms and attributing the illness to a chemical imbalance. The belief that the treatment is *harmful* is associated with failing to take antidepressants early, attributing symptoms to random factors and poor understanding of depressive symptoms.[55]

It is difficult to differentiate the stigmatizing beliefs related to depression from those related to antidepressants. Resisting or rejecting the use of antidepressants could be a way of avoiding the label of mentally ill.[56] In some cases, depression is seen as a sign of weakness, and antidepressants as indicators of the ''mentally weak'' or ''those unable to cope with their emotional problems''.[43,57]

Beliefs about psychotherapy vs medication

Preferring psychotherapy to drugs is consistently established in studies of patients with depression, primary care patients and the general population.[3] It has been found in the Spanish general population, even in relation to schizophrenia and bipolar disorder.[58] The factors associated with this preference include female sex, greater knowledge of psychotherapy or previous experience with it, paid time off and not having been recently treated with antidepressants.[3] Patients in serious condition also perceive the usefulness of pharmacological and psychotherapeutic co-therapy,[3] from which they can learn coping mechanisms and change their thinking patterns, patterns of coping with stress and difficult relationships.[59,60] This preference is maintained today, including in developed countries. However, there has been a gradual rise in positive assessments of psychotropic drugs, coinciding with increased rates of request for assistance from depressed patients.[61] Consequently, people familiar with treatment of depression tended to be more willing to recommend seeking help from mental health professionals, and to adopt various treatment options, especially medication.[62] This positive correlation in the perceived usefulness of treatment and the possibility of help from mental health professionals appeared more frequently in women,[63] in patients without a partner (separated, divorced or widowed), those who have received prior psychiatric treatment[60] and in patients with a more serious condition. For the general population or patients with a milder illness, higher importance is attributed to the family figure as support and to social workers or counsellors compared to mental health professionals.[3] The perceived efficiency of these types of treatments is also favourable to psychotherapy in the general population and in primary care patients, especially in the case of males and the elderly population. In the case of depressed patients, studies have been heterogeneous, some favouring psychotherapy and others medication.[3] Symptoms of cluster B personality disorders have been associated with a negative attitude towards psychotherapy and poor adherence to this treatment in patients with major depression, while symptoms from cluster C personality disorders were associated with a positive attitude.[11]

Assessment

Given the importance of the beliefs and attitudes for adherence, these aspects need to be assessed in all patients. Although the most habitual method will be evaluation in the context of the clinical interview, there are psychometric scales available, some of which are validated in Spain.

Various factors can affect the validity of the attitudes reported by the patient about the medication, such as certain symptoms, stigma and social desirability. Consequently, using simplified interviews, performing the assessment when the patient is stable or has minimal symptoms and avoiding administering stigmatizing assessments (e.g., a symptom rating scale) have been recommended when assessing adherence.[64]

The *Beliefs about Medicines Questionnaire* (BMQ)[65] was designed to evaluate beliefs about medication. It consists of 2 scales: 1 that assesses beliefs about medication in general (BMQ-General) and another scale that evaluates the patient's opinions on their specific treatment (BMQ-Specific). There is a validated version in Spain. Its study of psychometric properties—conducted with chronic, hypertensive, diabetic and university student patients—showed good validity and reliability; however, it would be advisable to carry out studies in other populations and with other types of treatment.[66]

The *Drug Attitude Inventory* (DAI),[67] a widely used scale, was developed for patients with schizophrenia, although it has been used in different psychiatric disorders.[67] It assesses attitudes, beliefs and feelings in relation to taking medication, as well as the subjective effect of antipsychotics and illness awareness. The most commonly used version is one which is reduced to 10 items.[64] There is a validated version in Spanish.[68]

There are other scales, although lacking validation in Spain, such as the *Brief Evaluation of Medication Influences*

and Beliefs (BEMIB)[69] and the *Rating of Medication Influences* (ROMI),[70] both based on the Health Belief Model. The *Medication Adherence Rating Scale* (MARS),[71] initially developed for use in patients with schizophrenia and psychosis, assesses adherence and attitudes toward medication.

Study limitations and methodological difficulties

In studying beliefs towards depression and its treatment, questionnaires created by the authors are frequently used, although they are not validated and difficult to repeat. Only some have used validated belief scales such as the *Beliefs about Medicines Questionnaire or the Drug Attitude Inventory*.[12,27,55] Most studies on adherence have used self-reported measures of adherence, with which its estimation is probably being over evaluated, given that patient-reported adherence is the least valid[64] and tends to be greater than the real figure.[72] On the other hand, in the articles reviewed, it is difficult to differentiate those beliefs that refer only to antidepressants from those that refer to psychotropic medications in general.[34] In the same vein, it is difficult to separate the perceived stigma related to depression from that related to antidepressant treatment. With samples of depressed patients, the study of beliefs about depression, its treatment and the variables related to it has the disadvantage that these beliefs may be influenced by the depression itself. The existence of depression, depressive symptoms[3] and the greater severity of these symptoms[55] have been found to influence beliefs about depression and antidepressant treatment, so it is important to have studies that evaluate these beliefs in the absence of depression.

Conclusions

Non-adherence is a frequent phenomenon, both in antidepressant treatment and psychotherapy, reaching 30–60% overall. It is a multifactorial phenomenon and assessing risk factors is essential to address them later. Non-adherence to psychotherapy is still understudied. Beliefs and attitudes towards medication and psychotherapy potentially influence adherence and should be evaluated in all patients. There are multiple causal factors underlying these beliefs and attitudes and they are still understudied. Each patient should be assessed individually, since each person is unique in their personal history and their way of viewing depression and its treatment. Negative beliefs (misconceptions, prejudices), negative attitudes and possible stigma perceived towards medication and/or depression must be identified and addressed in the context of an appropriate therapeutic relationship. This is because these factors can be important in non-adherence and identifying them and the patient's preferences may point towards the type of treatment. Overall, there is currently a preference for psychotherapy. However, the positive assessment of psychopharmaceuticals has increased in the last few years, in line with movement towards a biomedical framework regarding beliefs about the aetiology of depression. On the other hand, given that beliefs and attitudes are changeable, influenced by various factors, they should be assessed throughout the evolution of the illness.

Patient beliefs about depression and its treatment are an essential factor for adherence to both psychotherapy and psychotropic drugs and, therefore, for the development of the disorder. The search for the best possible adherence should take place in the context of a good therapeutic relationship, psychoeducation, assessing beliefs and attitudes towards medication and psychotherapy, dealing with any negative beliefs and attitudes and considering patient preferences.

Conflict of interests

The authors have no conflict of interest to declare.

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