

Why you should read this article:

- To recognise the psychological effects of chronic skin conditions that patients may experience
- To refresh your knowledge of the core principles of the assessment and management of mental health issues
- To identify how you could enhance the care and support of patients with chronic skin conditions in your practice

Assessing and managing mental health issues in people with chronic skin conditions

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Citation

Penzer-Hick R, Haddad M (2021) Assessing and managing mental health issues in people with chronic skin conditions. *Nursing Standard*. doi: 10.7748/ns.2021.e11744

Peer review

This article has been subject to external double-blind peer review and checked for plagiarism using automated software

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Conflict of interest

None declared

Accepted

30 March 2021

Published online

September 2021

Open access

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Abstract

Chronic skin conditions, such as atopic eczema and psoriasis, can have significant psychological effects on patients. For example, these conditions can affect an individual's functioning, and may lead to mental health issues such as depression or anxiety disorders. This article identifies the links between chronic skin conditions and mental health issues, and discusses the nurse's role in assessing, managing and supporting patients with these comorbidities. It also emphasises the importance of using validated tools and a holistic approach to care, and discusses how to address challenges that patients may experience.

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Keywords

anxiety, depression, dermatology, eczema, mental health, psoriasis, psychosocial, skin, skin conditions, stress

The skin is the largest organ in the human body and can be affected by a broad range of conditions, some of which may be chronic and relapsing in nature, for example atopic eczema and psoriasis. A five-nation European study using a random sample of more than 12,000 adults indicated that the lifetime prevalence rates of physician diagnosed skin conditions were around 28% for warts, 7% for atopic eczema, 5% for psoriasis and 3% for skin cancer (Svensson et al 2018).

Skin conditions are a substantial cause of disability. In the Global Burden of Disease Study 2013, skin and subcutaneous diseases were identified as the 18th leading cause of global disability-adjusted life years (DALYs) (a standard metric used to estimate disease burden) (Karimkhani et al 2017), and the fourth leading cause of non-fatal disease burden worldwide. These conditions can also have significant negative effects on people's quality of life, while some, such as skin cancer, may be life threatening.

People with chronic skin conditions frequently experience psychological challenges that can

affect their social functioning (Tuckman 2017). For example, they may experience fearful anticipation of interaction with others, even when symptoms are not present, and develop avoidance-coping mechanisms. This can subsequently prevent these individuals from fully participating in social and recreational activities or employment (Tuckman 2017). Studies have shown that depressive symptoms and reduced psychological well-being are associated with conditions such as atopic eczema (Smirnova et al 2020), and the extent of distress associated with atopic eczema appears to be greater than that for other long-term conditions (Cheng and Silverberg 2019).

In the UK, the All-Party Parliamentary Group on Skin (APPGS) (2020) conducted a survey to explore the experiences of people with skin conditions ($n=544$), asking them to describe how their condition affected their mental health. Of the respondents, 98% reported that their condition affected their emotional and psychological well-being, while 5% reported experiencing suicidal thoughts.

The APPGS (2020) report expressed concern that access to specialist mental health support for people with skin conditions is limited throughout the UK, despite a growing need for such services.

There is a consistent link between the experience of skin conditions and an increased likelihood of mental health issues, most commonly depression and anxiety disorders (Barankin and DeKoven 2002, Jafferany and Pastolero 2018). This increased risk of comorbid mental health issues requires healthcare professionals to have sufficient confidence and skills to recognise and respond to signs of psychological distress, as well as to recognise the features of mental health issues and indicators of risk (APPGS 2020).

This article seeks to clarify the links between chronic skin conditions and mental health issues, and outlines what is involved in the assessment, management and care of patients with these comorbidities. It provides practical guidance for nurses in all areas of practice, detailing the actions they can take to support this patient group.

Box 1. Principles for assessing the mental health of patients with chronic skin conditions

- » Assessments conducted by healthcare professionals in primary and secondary care should be holistic, addressing psychosocial as well as physical aspects of the patient's presentation
- » It is important to demonstrate empathy, particularly because perceptions of stigmatisation are common among people with a visible skin condition and may exert a strong negative effect on their quality of life
- » As with other chronic physical health conditions, when assessing a patient with a skin condition, be alert to the presence of mental health issues – particularly depression and anxiety disorders
- » Review the patient's history to identify any previous mental health issues
- » Where depression or anxiety are suspected, initially use an appropriate brief screening tool such as the Patient Health Questionnaire-2 (PHQ-2) (Kroenke et al 2003) or the Generalised Anxiety Disorder-2 (GAD-2) (Kroenke et al 2007)
- » When conducting a full mental health assessment, use appropriate validated tools, such as the PHQ-9 (Kroenke et al 2001) for depression or the GAD-7 (Spitzer et al 2006). These tools can inform the assessment and assist in treatment evaluation
- » When a mental health issue is evident, it is crucial to assess the patient's suicidal ideation and intent. If a risk of self-harm or suicide is identified, assess the adequacy of social support and the patient's awareness of sources of support. Arrange support appropriate to their level of risk

(National Institute for Health and Care Excellence 2009, 2011, Ghosh et al 2013, All-Party Parliamentary Group on Skin 2020)

Chronic skin conditions

Like other long-term conditions, chronic skin conditions are characterised by a persistent illness course and the requirement for ongoing treatment. The time course for some of these conditions is typified by remission and relapse, whereby symptoms may disappear for up to several years, only to subsequently reappear at times of particular stress. Rather than a curative approach, treatments are used to manage the condition's effects. The two most common skin conditions that demonstrate this pattern are atopic eczema and psoriasis, which can be controlled effectively with medicines, but where patients can also experience acute exacerbations ('flares') during which their condition is worse.

Eczema is characterised by dry skin, inflammation and itching. The most common form is atopic eczema, which usually affects children, but can extend into adulthood. In addition, there are several other forms of eczema that may affect older adults, for example nummular eczema and varicose eczema (Ersser and Van Onselen 2010).

Psoriasis is an inflammatory skin disease characterised by red patches of skin covered by scaly plaques, which may be itchy and cause bleeding if scratched. It is estimated to affect around 1% to 2% of people in the UK (National Institute for Health and Care Excellence (NICE) 2017). Although it can occur at any age, two peaks in its incidence have been identified – one between 20 years and 30 years of age and the other between 50 years and 60 years of age (Cohen et al 2012). Psoriasis can result in significant impairments in a person's functioning, as well as various psychological issues.

Interaction between mental health and skin conditions

Understanding the link between mental health and skin conditions is important because their co-occurrence can result in substantially increased disability and distress, and may negatively affect the course of an individual's skin condition and their response to treatment (Barankin and DeKoven

2002). The link between mental health and skin conditions involves a complex interaction underpinned by a range of mechanisms acting as both a cause and consequence (Haddad 2010). This means that mental health issues can be (Koo and Lee 2003):

- » A direct cause of a skin condition – that is, a person has a primary psychiatric disorder that leads to a skin condition.
- » A consequence of a skin condition.
- » A factor that influences the development and course of a skin condition.

There are several primary psychiatric disorders that can result in skin conditions. For example, people with obsessive compulsive disorder (OCD) and related disorders – predominantly trichotillomania (hair pulling), body dysmorphic disorder and skin-picking disorder – frequently present to dermatologists due to associated hair and skin symptoms (Mavrogiorgou et al 2015). These people are likely to require referral to specialist mental health services, so this article does not focus on this patient group.

This article explores the more common situation and pathway, in which the clinical features and chronic nature of a person's skin condition affect their mood and psychological well-being. These effects can range from mild and fluctuating stress to severe, disabling and potentially life-threatening mental health issues (Barankin and DeKoven 2002). In addition, psychosocial factors such as prolonged stress, depressed mood and anxiety can affect a person's inflammatory and immune responses (Hall et al 2012), and so can influence the development of skin conditions and/or exacerbate their symptoms. These factors and conditions may also influence an individual's behaviour, for example by reducing their adherence to treatment or leading to unhealthy lifestyle choices.

Assessment of mental health issues

Fundamental to the effective management of chronic skin conditions is a holistic assessment

that addresses the psychosocial aspects of an individual's history and presentation. Understanding the effects that a chronic skin condition has on an individual requires a holistic assessment because it cannot be assumed that the effects of the condition on a person's mental health are directly related to disease severity.

Blanco et al's (2019) study examined the relationships between disease severity and illness perceptions in 211 patients with hidradenitis suppurativa – a painful chronic inflammatory skin condition characterised by nodules and pustulent abscesses, often leading to open wounds that are challenging to heal. Blanco et al (2019) found that patients' psychological well-being was much more closely associated with the patient's beliefs about their condition than healthcare professionals' assessments of disease severity. Thus, what may be perceived as a mild condition by a healthcare professional could have severe psychological effects on the patient (Blanco et al 2019). Box 1 outlines some of the principles for assessing the mental health of patients with chronic skin conditions.

Various tools have been developed to assist in the objective assessment of a person's mental health, and these are reviewed and described in the NICE (2011) guidance in greater detail. This article describes some of the principles of assessment and tools used for depression and anxiety disorders, since these are the most common mental health issues experienced by people with chronic skin conditions (Barankin and DeKoven 2002, Jafferany and Pastolero 2018).

Depression

Depression is a common and disabling mental health issue that affects around one in six people over the course of a lifetime (Bromet et al 2011). Its core features are persistent low mood and a loss of enjoyment or interest in activities and experiences, which may be accompanied by a range of associated emotional, cognitive, physical and behavioural symptoms,

for example sleep disturbances, changes in appetite, reduced energy, feelings of guilt and/or worthlessness, and suicidal thoughts (NICE 2009).

The risk of experiencing depression is substantially increased among people with any chronic physical health condition, with reviews identifying that its prevalence is approximately doubled in people with diabetes mellitus, hypertension, coronary artery disease and heart failure compared with healthy controls (NICE 2009). This elevated risk is evident for chronic skin conditions such as psoriasis (Dowlatsahi et al 2014).

An extensive evaluation of more than 100 studies found that several tools are effective in identifying depression in people with chronic physical health conditions (Meader et al 2011). One of these tools is the Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al 2001), which is widely used in primary care services in the UK, has good psychometric characteristics and has been found to be feasible and acceptable as an assessment tool for patients with comorbid physical health conditions. However, rather than asking every question on the PHQ-9, nurses can use the brief PHQ-2 (Kroenke et al 2003) screening tool.

The PHQ-2 has been found to have excellent sensitivity for detecting depression, and it has been suggested to be the preferred method for quickly assessing depression (Meader et al 2011). It is also the recommended initial tool for assessing depression in people with chronic physical health conditions (NICE 2009). The PHQ-2 comprises the first two questions of the PHQ-9, which require a yes or no response from the patient:

- » During the last month, have you often been bothered by feeling down, depressed or hopeless?
- » During the last month, have you often been bothered by little interest or pleasure in doing things?

A positive response to either or both of these questions indicates depression may be likely, and a thorough mental health assessment is required. If it is

Key points

- Examples of chronic skin conditions include atopic eczema and psoriasis
- Mental health issues can be a direct cause of a skin condition, a consequence of having a skin condition, or a factor that influences the development and course of a skin condition
- To manage chronic skin conditions effectively, it is essential to undertake a holistic assessment that incorporates the psychosocial aspects of a person's history and presentation
- The ability to clearly communicate the associations between mental health, stress, and the development and course of skin conditions remains an important aspect of patient education, and can inform approaches to improve condition self-management

beyond the limits of the nurse's competence to perform such an assessment, the patient should be referred to an appropriate healthcare professional (NICE 2009). Box 2 describes what is involved in performing a mental health assessment in patients with suspected depression.

Anxiety disorders

One of the most prevalent types of anxiety is generalised anxiety disorder (GAD). The core feature of GAD is excessive anxiety and worry about several events or activities, which occurs more days than not for a period of at least six months (NICE 2011). Unlike in phobic anxiety disorders, the symptoms of GAD are not focused on specific events or activities, and they may be accompanied by restlessness, fatigue, concentration issues, irritability, muscle tension and sleep disturbances (NICE 2011).

Nurses should be aware that having a chronic skin condition is a potential risk factor for anxiety disorders (NICE 2011). Where a person appears to be experiencing somatic features of anxiety, such as muscle aches, insomnia and sweating, or may be at risk of GAD, the nurse should use an appropriate brief screening tool such as the GAD-2 (Kroenke et al 2007).

The GAD-2 is a brief two-item scale that comprises the

FURTHER RESOURCES

Skin Support – patient support groups
www.skin-support.org.uk/content/patient-support-groups

first two statements of the longer GAD-7 (Spitzer et al 2006) scale. The GAD-2 has been extensively evaluated and found to have high sensitivity and specificity for GAD (NICE 2011). It also performs adequately as a screening tool for other common anxiety disorders, such as panic disorder, social anxiety disorder and post-traumatic stress disorder (PTSD) (Kroenke et al 2007). In the GAD-2, the patient scores each of the following statements on a scale of 0 (not at all) to 3 (nearly every day) according to their frequency over a two-week period (Kroenke et al 2007):

- » Feeling nervous, anxious or on edge.
- » Not being able to stop or control worrying.

If the patient scores three or more on the GAD-2, the nurse should consider the possibility of an anxiety disorder. If it is within the limits of the nurse's competence, they can then perform a full assessment for anxiety disorders; if not, the person should be referred to an appropriate healthcare professional for this (NICE 2011). If the patient scores less than three, but the nurse is still concerned about the possibility of an anxiety disorder, they should ask the following question: 'Do you find yourself avoiding places or activities and does this cause you problems?'

If the person answers yes to this question, an anxiety disorder should be considered and a full assessment should be conducted to determine the number, severity and duration of their symptoms, as well as the degree of distress and functional impairment that they are experiencing (NICE 2011). The seven-item GAD-7 (Spitzer et al 2006) scale is a valid tool that can be used as part of this full assessment (NICE 2011).

Assessing suicide risk

If a mental health issue has been identified during an assessment, it is necessary to determine the person's risk of suicide. Suicidal thoughts are relatively common among people with depression and other mental health issues, and the nurse should ask sensitive but clear questions to examine such thoughts and any suicidal intention. The assessment should also include signposting the availability of social support and awareness of other sources of support, and ensuring that the patient knows what to do if the situation deteriorates.

The extent of the person's risk of suicide will determine the nurse's response. Where there is immediate or considerable suicide risk – for example if a person describes clear intentions, has made a plan or has a history of suicide attempts – urgent referral to specialist mental health services is required (NICE 2011).

If the nurse has concerns but is uncertain about the most appropriate approach to take, they need to discuss this with their colleagues immediately to determine how to address any risks and prevent harm. It is also important that the findings of the risk assessment are documented clearly in the patient's records.

Management of mental health issues

The approaches used to address mental health issues in people with chronic skin conditions are similar to the evidence-based approaches used for people with mental health issues without a comorbid condition. One principle that guides care is shared decision-making, in which a patient's care and treatment

is based on a full discussion of their preferences, based on the available options and their past experiences of treatment. This should be used in combination with a stepped-care approach, where the intensity of care provided is based on the severity of people's mental health issues.

Low-intensity psychological interventions for mental health issues are based on a detailed assessment, and they include guided self-help, exercise, psychoeducation and peer support groups (NICE 2009, 2011). These may be provided and coordinated by the multidisciplinary team in primary or secondary care, and may involve services such as local Improving Access to Psychological Therapies (IAPT). Patients should also be informed of relevant support groups, as well as other local and national resources.

Higher-intensity psychological interventions involve individual and group psychological treatments such as cognitive behavioural therapy (CBT). In CBT, an individual works collaboratively with a therapist to identify the effects of their thoughts, beliefs and interpretations on the symptoms, feelings and issues they are currently experiencing (NICE 2011). Antidepressants, such as selective serotonin reuptake inhibitors, have been found to be effective treatments for depression and anxiety disorders for people with comorbid physical health conditions (NICE 2011).

Nurses can provide patient education on the role of stress in exacerbating skin conditions. For example, stress has been reported to influence the onset and progression of psoriasis (Barankin and DeKoven 2002). Therefore, it may be useful to provide advice on reducing stress through techniques such as deep breathing.

Challenges for patients Getting their voice heard

People with chronic skin conditions need to cope with the physical discomfort this brings and the psychological burden associated with how it makes them feel. This may be compounded by the condition's effects on their

Box 2. Performing a mental health assessment in patients with suspected depression

A healthcare professional who is competent to perform a mental health assessment should:

- » Ask three further questions to improve the accuracy of the assessment of depression:
 - During the last month, have you often been bothered by feelings of worthlessness?
 - During the last month, have you often been bothered by poor concentration?
 - During the last month, have you often been bothered by thoughts of death?
- » Review the patient's mental state and associated functional, interpersonal and social issues
- » Consider the role of the chronic physical health condition and any prescribed medicines in the development or maintenance of the patient's depression
- » Ascertain that the optimal treatment for the patient's physical health condition is being provided and adhered to, seeking specialist advice if necessary

(National Institute for Health and Care Excellence 2009)

social relationships, employment and finances. Nurses should take a holistic approach to supporting patients with chronic skin conditions, acknowledging the importance of treating physical symptoms and the psychological effects that these symptoms have on the patient.

As with many chronic conditions, this approach should start with the nurse listening to the patient's story and using open-ended questions to explore their experiences. The expertise that the patient brings regarding their condition should be acknowledged and respected, developing a plan of care that reflects this (Coulter et al 2015). For example, when describing how to use topical treatments, the nurse should assess what has been used before and whether it has had any benefit on the condition.

If the patient reports no benefit, the nurse should check whether the topical treatment was used correctly, or whether the treatment was too challenging to incorporate into the patient's daily life. If such issues are raised, the nurse should consider amending the treatment if possible.

Accessing care at the right time

Timely diagnosis and effective interventions are essential to optimise patient outcomes and minimise the negative psychological effects of living with a chronic skin condition. Therefore, in addition to providing ongoing medical treatment and care, access to psychological and educational support should be ensured. This support will typically entail providing patient education and information on simple psychological techniques to manage symptoms such as itching, scratching and sleep disturbances.

A Cochrane review evaluated the findings of ten randomised controlled trials of psychological and/or educational interventions used to manage children with atopic eczema (Ersser et al 2014). It found some evidence that educational interventions can lead to reduced atopic eczema severity and improvements in quality of life, and that the use of relaxation methods

may also reduce the severity of the condition.

Adhering to dermatological treatments

Chronic skin conditions that are mild or moderate in severity are generally managed by topical therapies, including emollients and topical corticosteroids. Patients with moderate or severe disease severity are more likely to be prescribed systemic therapies such as phototherapy, methotrexate or biologic medicines. However, evidence has demonstrated that adherence to treatment for skin conditions is low (Finlay 2017). There are several practical factors that may affect patients' adherence to dermatological treatments, including:

- » Topical and systemic treatments may take several weeks to show an effect. Having to apply a topical preparation for 2-3 weeks before seeing any positive outcomes requires a commitment from the patient, as well as a belief that their condition will improve as a result.
- » Applying topical preparations is time consuming. For example, a patient with atopic eczema will need to apply an emollient at least twice per day and often more frequently. When experiencing an acute flare, they will need to use a topical corticosteroid daily and, depending on the location of the eczema on their body, this could be two different topical corticosteroids, such as one for the body and a less potent one for the face. If atopic eczema is on their scalp, this will involve a third topical preparation. In addition, if the patient is paying for their prescriptions, these treatments will be expensive.
- » Topical preparations are often messy. While there have been improvements in topical preparations, they are still frequently greasy and not easy to use as part of a normal self-care regimen. For example, applying a greasy emollient before getting dressed can feel unpleasant and leave marks on clothing.

- » Systemic treatments can have unwanted side effects, including making the condition worse before improvements are seen. Ongoing blood monitoring will be required for many treatments, such as methotrexate used to treat severe psoriasis, and some treatments, such as phototherapy, will require patients to attend 2-3 hospital appointments per week over a ten-week period.

Nurses need to be aware of these potential barriers to treatment and address them where possible. However, one systematic review by Vangeli et al (2015) acknowledged that while practical factors may influence patients' adherence to treatment, psychosocial factors were the strongest determinants of adherence. These psychosocial factors included the relationship between the patient and healthcare professional, perceptions of treatment concerns, and depression. Therefore, developing effective relationships with patients, considering their mental health and well-being, and supporting them to develop the skills necessary to adhere to their treatment, are all important in achieving optimal patient outcomes.

Conclusion

Chronic skin conditions are relatively common and often disabling, so nurses and other healthcare professionals are likely to encounter patients with such conditions in both general and specialist settings. These conditions are also associated with an increased risk of depression and anxiety disorders, and less commonly with primary psychiatric disorders. Therefore, those involved in the assessment and care of people with chronic skin conditions should be alert to the likelihood of mental health issues arising in this patient group, as well as confident in screening for such issues and making referrals to specialist services where appropriate.

The ability to clearly communicate the associations between mental health, stress, and the development and course of skin conditions remains an important part of patient education, and can inform approaches to improve condition self-management.

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References

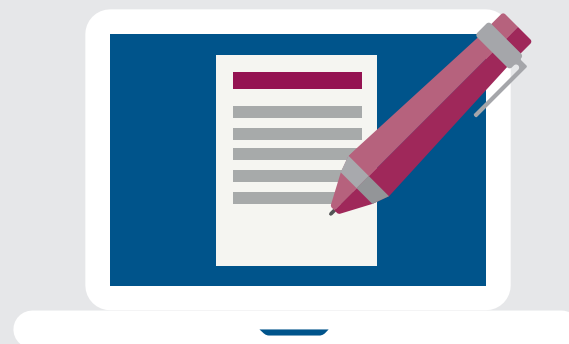
- All-Party Parliamentary Group on Skin (2020) Mental Health and Skin Disease Report. www.appgs.co.uk/wp-content/uploads/2020/09/Mental_Health_and_Skin_Disease2020.pdf (Last accessed: 9 July 2021.)
- Barankin B, DeKoven J (2002) Psychosocial effect of common skin diseases. *Canadian Family Physician*, 48, 712-716.
- Blanco AP, Turner MA, Petrof G et al (2019) To what extent do disease severity and illness perceptions explain depression, anxiety and quality of life in hidradenitis suppurativa? *British Journal of Dermatology*, 180, 2, 338-345. doi: 10.1111/bjd.17123
- Bromet E, Andrade LH, Hwang I et al (2011) Cross-national epidemiology of DSM-IV major depressive episode. *BMC Medicine*, 9, 90. doi: 10.1186/1741-7015-9-90
- Cheng BT, Silverberg JJ (2019) Depression and psychological distress in US adults with atopic dermatitis. *Annals of Allergy, Asthma & Immunology*, 123, 2, 179-185. doi: 10.1016/j.anai.2019.06.002
- Cohen SN, Baron SE, Archer CB (2012) Guidance on the diagnosis and clinical management of psoriasis. *Clinical and Experimental Dermatology*, 37, Suppl 1, 13-18. doi: 10.1111/j.1365-2230.2012.04337.x
- Coulter A, Entwistle VA, Eccles A et al (2015) Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database of Systematic Reviews*, Issue 3. CD010523. doi: 10.1002/14651858.CD010523.pub2
- Dowlatsahi EA, Wakkee M, Arends LR et al (2014) The prevalence and odds of depressive symptoms and clinical depression in psoriasis patients: a systematic review and meta-analysis. *Journal of Investigative Dermatology*, 134, 6, 1542-1551. doi: 10.1038/jid.2013.508
- Ersser SJ, Van Onselen J (2010) Eczema. In Penzer R, Ersser SJ (Eds) *Principles of Skin Care: A Guide for Nurses and Health Care Practitioners*. Wiley-Blackwell, Oxford, 151-178.
- Ersser SJ, Cowdell F, Latter S et al (2014) Psychological and educational interventions for atopic eczema in children. *Cochrane Database of Systematic Reviews*, Issue 1. CD004054. doi: 10.1002/14651858.CD004054.pub3
- Finlay A (2017) Every dermatology consultation: think adherence. *British Journal of Dermatology*, 176, 3, 558-559. doi: 10.1111/bjd.15250
- Ghosh S, Behere RV, Sharma P et al (2013) Psychiatric evaluation in dermatology: an overview. *Indian Journal of Dermatology*, 58, 1, 39-43. doi: 10.4103/0019-5154.105286
- Haddad M (2010) Caring for patients with long-term conditions and depression. *Nursing Standard*, 24, 24, 40-49. doi: 10.7748/ns2010.02.24.24.40.c7557
- Hall JM, Cruser D, Podawiltz A et al (2012) Psychological stress and the cutaneous immune response: roles of the HPA axis and the sympathetic nervous system in atopic dermatitis and psoriasis. *Dermatology Research and Practice*, 403908. doi: 10.1155/2012/403908
- Jafferany M, Pastolero P (2018) Psychiatric and psychological impact of chronic skin disease. *Primary Care Companion for CNS Disorders*, 20, 2, 17nr02247. doi: 10.4088/PCC.17nr02247
- Karimkhani C, Dellavalle RP, Coffeng LE et al (2017) Global skin disease morbidity and mortality: an update from the Global Burden of Disease Study 2013. *JAMA Dermatology*, 153, 5, 406-412. doi: 10.1001/jamadermatol.2016.5538
- Koo JYM, Lee CS (2003) General approach to evaluating psychodermatological disorders. In Koo JYM, Lee CS (Eds) *Psychocutaneous Medicine*. CRC Press, Boca Raton FL, 1-12.
- Kroenke K, Spitzer RL, Williams JB (2001) The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16, 9, 606-613. doi: 10.1046/j.1525-1497.2001.016009606.x
- Kroenke K, Spitzer RL, Williams JB (2003) The Patient Health Questionnaire-2: validity of a two-item depression screener. *Medical Care*, 41, 11, 1284-1292. doi: 10.1097/01.MLR.0000093487.78664.3C
- Kroenke K, Spitzer RL, Williams JB et al (2007) Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146, 5, 317-325. doi: 10.7326/0003-4819-146-5-200703060-00004
- Mavroggiorgou P, Bader A, Stockfleth E et al (2015) Obsessive-compulsive disorder in dermatology. *Journal of the German Society of Dermatology*, 13, 10, 991-999. doi: 10.1111/ddg.12781
- Meader N, Mitchell AJ, Chew-Graham C et al (2011) Case identification of depression in patients with chronic physical health problems: a diagnostic accuracy meta-analysis of 113 studies. *British Journal of General Practice*, 61, 593, e808-e820. doi: 10.3399/bjgp11X613151
- National Institute for Health and Care Excellence (2009) *Depression in Adults with a Chronic Physical Health Problem: Recognition and Management*. Clinical guideline No. 91. NICE, London.
- National Institute for Health and Care Excellence (2011) *Common Mental Health Problems: Identification and Pathways to Care*. Clinical guideline No. 123. NICE, London.
- National Institute for Health and Care Excellence (2017) *Psoriasis: Assessment and Management*. Clinical guideline No. 153. NICE, London.
- Smirnova J, Montgomery S, Lindberg M et al (2020) Associations of self-reported atopic dermatitis with comorbid conditions in adults: a population-based cross-sectional study. *BMC Dermatology*, 20, 23. doi: 10.1186/s12895-020-00117-8
- Spitzer RL, Kroenke K, Williams JB et al (2006) A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166, 10, 1092-1097. doi: 10.1001/archinte.166.10.1092
- Svensson A, Ofenloch R, Bruze M et al (2018) Prevalence of skin disease in a population-based sample of adults from five European countries. *British Journal of Dermatology*, 178, 5, 1111-1118. doi: 10.1111/bjd.16248
- Tuckman A (2017) The potential psychological impact of skin conditions. *Dermatology and Therapy*, 7, Suppl 1, 53-57. doi: 10.1007/s13555-016-0169-7
- Vangeli E, Bakhshi S, Baker A et al (2015) A systematic review of factors associated with non-adherence to treatment for immune-mediated inflammatory diseases. *Advances in Therapy*, 32, 11, 983-1028. doi: 10.1007/s12325-015-0256-7

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