Psychosocial effect of common skin diseases

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ABSTRACT

OBJECTIVE To increase awareness of the psychosocial effect of acne, atopic dermatitis, and psoriasis.

QUALITY OF EVIDENCE A literature review was based on a MEDLINE search (1966 to 2000). Selected articles from the dermatologic and psychiatric literature, as well as other relevant medical journals, were reviewed and used as the basis for discussion of how skin disease affects patients' lives and of appropriate management. Studies in the medical literature provide mainly level III evidence predominantly based on descriptive studies and expert opinion.

MAIN MESSAGE Dermatologic problems can result in psychosocial effects that seriously affect patients' lives. More than a cosmetic nuisance, skin disease can produce anxiety, depression, and other psychological problems that affect patients' lives in ways comparable to arthritis or other disabling illnesses. An appreciation for the effects of sex, age, and location of lesions is important, as well as the bidirectional relationship between skin disease and psychological distress. This review focuses on the effects of three common skin diseases seen by family physicians: acne, atopic dermatitis, and psoriasis.

CONCLUSION How skin disease affects psychosocial well-being is underappreciated. Increased understanding of the psychiatric comorbidity associated with skin disease and a biopsychosocial approach to management will ultimately improve patients' lives.

RÉSUMÉ

OBJECTIF Accroître la sensibilisation aux effets psychologiques de l'acné, de la dermatite atopique et du psoriasis.

QUALITÉ DES DONNÉES Une recension des ouvrages scientifiques a été effectuée dans MEDLINE (de 1966 à 2000). Des articles tirés des ouvrages en dermatologie et en psychiatrie ainsi que d'autres revues médicales pertinentes ont fait l'objet d'une étude et ont servi de base de discussion sur la façon dont les maladies de la peau affectent la vie des patients ainsi que sur la prise en charge appropriée. Les études dans les revues médicales présentent principalement des données probantes de niveau 3, surtout fondées sur des études descriptives et l'opinion d'experts.

PRINCIPAUX MESSAGES Les problèmes dermatologiques peuvent se traduire par des effets psychosociaux qui affectent sérieusement la vie des patients. Plus qu'une nuisance cosmétique, les maladies de la peau peuvent produire de l'anxiété, de la dépression et d'autres problèmes psychologiques qui affectent la vie des patients de manière comparable à l'arthrite ou d'autres maladies invalidantes. Il importe d'apprécier l'influence du sexe, de l'âge et de l'emplacement des lésions ainsi que la relation bidirectionnelle entre les maladies de la peau et la détresse psychologique. Cette étude porte principalement sur les effets de ces trois maladies courantes de la peau observées par les médecins de famille: l'acné, la dermatite atopique et le psoriasis.

CONCLUSION On sous-estime les effets négatifs des maladies de la peau sur le bien-être psychosocial. Une meilleure compréhension de la comorbidité psychiatrique associée aux maladies de la peau et une approche biopsychosociale à la prise en charge amélioreront en bout de ligne la vie des patients.

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Dermatologic problems account for 15% to 20% of visits to family practices.[1,2] Yet how skin disease affects patients' psychosocial well-being seldom receives attention. With advances in generic and specific instruments measuring quality of life, there is now a greater appreciation of how skin diseases affect children and adults.[3,4] The field of psychodermatology has developed as a result of increased interest and understanding of the relationship between skin disease and various psychological factors.[5]

Patients with real and perceived imperfections in important body image areas, such as the face, scalp, hands, and genital area, are prone to distress.[6,7] Blemishes on other parts of the body can cause distress and require treatment as well.[8] Patients with body dysmorphic disorder, acne, psoriasis, and particularly men and women with facial conditions are more likely to have reactive depression and be at risk of suicide.[6,7,9,10]

Acne, atopic dermatitis, and psoriasis are among the most common skin conditions presenting to primary care physicians. They are the most studied in how they affect psychosocial health.

Quality of evidence

A MEDLINE search of English-language literature from May 1966 to May 2001 using the MeSH words psoriasis, acne vulgaris, atopic dermatitis, and psychology revealed predominantly descriptive studies of how skin diseases affect mental health, most often assessed by questionnaires. Suggestions for managing patients with psychosocial problems were based for the most part on the opinions of experts.

Acne

Acne is a common inflammatory skin condition often not appreciated by medical staff and laypeople as being anything more than a superficial nuisance. The prevalence of acne in schoolchildren ranges from 30% to 100% depending on age, with 93.3% of 16- to 18-year-olds experiencing acne.[11] Acne accounts for 3% of dermatologic primary care visits and 0.6% of all visits to family physicians.[1,2]

Skin conditions, such as acne, are sometimes thought of as insignificant in comparison with diseases of other organ systems. Acne's effect on psychosocial and emotional problems, however, is comparable to that of arthritis, back pain, diabetes, epilepsy, and disabling asthma.[12] The psychosocial effect of acne was first recognized in 1948, when Sulzberger and Zaidens wrote, "There is no single disease which causes more psychic trauma and more maladjustment between parents and children, more general insecurity and feelings of inferiority, and greater sums of psychic assessment than does acne vulgaris."[13] Acne has a demonstrable association with depression and anxiety; it affects personality, emotions, self-image and esteem, feelings of social isolation, and the ability to form relationships.[12,14-17] Its substantial influence is likely related to its typical appearance on the face, and would help explain the increased unemployment rate of adults with acne.[18]

Physicians' assumptions about the effects of a skin condition are often inaccurate.[19] The psychological effect of acne is unique for each patient. Patients should be asked how much their acne bothers them, regardless of how severe it appears to physicians. Acne in adolescence can affect self-image and assertiveness, factors important in forming friendships and dating. Although we often perceive adolescents as being more influenced by the psychosocial effects of acne, older patients are more bothered by the appearance of acne and consequently report a more substantial effect on their lives.[14]

Because the face is so important to body image, young men with severe scarring acne are at particular risk of depression and suicide.[6] We now know that much of the disability caused by acne can be reduced with appropriate medical treatment (**Table 1**).[20-23] Interventions, such as isotretinoin, that minimize or prevent scarring and reduce duration of the condition have the most pronounced psychosocial benefit.[20,21] Isotretinoin is increasingly prescribed by family physicians who have received proper training in its use; as a result, future research should readdress the effect of acne in light of this therapy. Despite its benefits, the substantial cost of isotretinoin poses a problem for some patients.

Atopic dermatitis

Atopic dermatitis is a common inflammatory skin disease that causes serious hardship to both patients and caregivers.[24-26] It affects 15% to 20% of children and constitutes approximately 15% of the skin-related concerns in general practice, and 2.7% of all concerns presenting to family physicians.[1,27-29]

When atopic dermatitis affects infants, skin sensation is often altered, which can result in impaired

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Table 1. General principles of management

EMPATHY

Ensure that patients feel heard and feel that their concerns are validated
Spend extra time with patients, particularly during initial diagnosis or exacerbations
Enquire about the psychosocial and economic effects of skin disease

EDUCATION

Discuss the natural history, medical management, and prognosis of skin disease
Dispel common misconceptions
Offer an informative handout describing the condition or refer patients to support groups or appropriate websites (**Table 2**)

MEDICAL MANAGEMENT

ACNE
- Topical agents (antibiotics, retinoids, benzoyl peroxide)
- Oral antibiotics (eg, minocycline)
- Isotretinoin (with proper physician training and patient education)

ATOPIC DERMATITIS
- Instruct patients on proper bathing habits (eg, oilated or oatmeal baths, pat dry, apply unscented emollients immediately afterward, use soap in genital and axillary regions only)
- Topical corticosteroids
- Oral antihistamines (eg, hydroxyzine)
- Oral antipruritics (eg, doxepin)
- Appropriate therapy for bacterial and herpetic superinfection or staphylococcal colonization
- Phototherapy
- New agents: topical tacrolimus

PSORIASIS
- Topical corticosteroids
- Tar therapy
- Vitamin D analogues (eg, calcipotriol)
- Topical anthralin
- Tazarotene
- Phototherapy or photochemotherapy
- Methotrexate
- Acitretin
- Cyclosporin
- Combination therapy

STRESS MANAGEMENT

Patients should be reminded of the interplay between skin disease and stress
Discuss the importance of reducing stress with such techniques as deep breathing or meditation, yoga, and writing a journal

REFERRAL

If unable to get skin disease under control or if toxic medications are required, refer patients to a dermatologist
Ask patients about the effects of their disease and consider treating for psychological problems or referral to a psychiatrist

emotional development because the skin is critical in sensory perception and communication.[26,30,31] Skin contact between infants and parents contributes not only to infants' learning their boundaries, but also positively affects the attitudes of caregivers; this serves to generate feelings of well-being and self-esteem.[26,32]

Atopic dermatitis can cause many sleepless nights for children, and therefore also their parents. It can also interfere with school performance and social relationships. One study found twice the rate of psychological disturbance among children with moderately severe and severe atopic dermatitis as among a control group.[33] Parents of infants and children with this condition often are anxious, frustrated, and angry both with their children and with their physicians. Their anger can produce a countertransference of the physician's feelings that is not optimal for a therapeutic relationship and that can lead to increased prescription of "desperate remedies," numerous referrals, and unnecessary testing.[26] Providing a few extra minutes to empathize with a patient's or parents' unique situation can help a strained therapeutic relationship.

Adult patients with this condition can have substantial salary loss from missed work, as well as large expenditures for emollients, topical steroids, clothing and bedding, laundry, and possibly consultation with alternative medicine practitioners. In particular, work-related adult hand dermatitis is a common cause of worker's compensation benefits and requires workplace modification, a new position, or even a new career in some situations. Along with the financial strain, patients are often concerned about personal appearance, attractiveness, career aspirations, and the ability to form personal relationships.[25] Impaired sexual function through both physical and psychological mechanisms can compound the adverse effects. Finally, allergic contact dermatitis caused by topical corticosteroids makes treatment more difficult; patients might require patch testing by a dermatologist.

Psoriasis

Psoriasis is a relatively common, chronic, inflammatory and hyperproliferative skin disease that occasionally requires systemic therapy. It affects 1.4% to 2.0% of the population and comprises 2.6% of skin-related visits to primary care physicians, or between 0.3% and 0.6% of all visits to family physicians.[1,2]

Though not life-threatening itself, psoriasis can have a substantial effect on patients' lives and can greatly increase the risk of suicide.[34] Patients are

often most troubled by the itching and scratching, bleeding, unsightly physical appearance, and noticeable flakes.[35] The degree of pruritus in patients with psoriasis and atopic dermatitis is strongly correlated to depressive psychopathology.[36] Patients with psoriasis cannot cosmetically conceal their lesions, often relying upon seasonally inappropriate, attention-drawing clothing instead. In a study by Rapp et al, both physical and mental functioning were reduced in patients with psoriasis comparable to that in arthritis, cancer, depression, and heart disease patients.[37] In a study of 369 patients with psoriasis, 35% reported that their condition affected their careers; 20% reported that they were substantially impaired in performing their work.[38]

Many patients report shame or embarrassment with resultant secretiveness and avoidance of common social activities, like sports and swimming. They have feelings of physical and sexual unattractiveness as well as helplessness, anger, and frustration.[39] Renowned American writer John Updike has poignantly described the personal effect of this condition.[40] The disease is clearly associated with increased alcohol consumption and smoking.[38] The effect of the disease decreases with increasing age, probably a function of both disease duration and a more settled lifestyle.[35] Women appear to report greater impairment of quality of life, while men report greater work-related stresses.[39]

While the severity of the condition can influence psychosocial well-being, it is important to appreciate that people perceive their conditions differently, such that those with only mild psoriasis can in fact be more bothered than those with extensive, severe disease. Proper medical treatment of psoriasis is important because it improves patients' lives. The treatment itself can also affect quality of life based on efficacy, convenience, discomfort, and time commitment.[41] Patients and physicians concerned about the toxic effects of treatment for severe disease should seek referral to a dermatologist experienced in use of these medications and in appropriate monitoring procedures. In 40% to 80% of patients with psoriasis, stress is reported to influence onset and progression of the condition; direct and indirect suppression of the immune system is the most likely etiology.[42] Accordingly, stress reduction techniques, such as meditation, could complement medical therapy. In the age of the Internet, physicians should also be able to recommend useful websites to their patients so that they can acquire further information and access to support groups (**Table 2**).

Table 2. Useful websites

Acne
• http://www.nlm.nih.gov/medlineplus/acne.html
• http://www.postgradmed.com/issues/1997/08_97/landow.htm
• http://www.skincarephysicians.com/acnenet
Atopic dermatitis
• http://www.eczema.org/
• http://www.skincarephysicians.com/eczemanet/index.htm
Psoriasis
• http://www.dermatology.org/skincare/psoriasis/psorhand.html
• http://www.psoriasis.org/
• http://www.skincarephysicians.com/psoriasisnet
National organizations
• http://www.dermatology.ca (Canadian Dermatology Association)
• http://www.aad.org (American Academy of Dermatology)

Conclusion

The high visibility of skin diseases increases the likelihood of stigmatization. Skin diseases should be measured not only by symptoms, but also by physical, psychological, and social parameters. "Patients' needs arise from the disease itself, from the effects of the disease on the patient's life and from the process of care."[19]

The effect of skin diseases on patients' lives is now known to be comparable to many "more serious" medical disorders.[12] Knowledge of mind-body interactions and interventions can help to improve patients' skin conditions and ultimately their quality of life.[43]

Counseling and psychotropic medications can benefit patients with depression or anxiety related to their skin problems, and consultation with a dermatologist and, in some cases, a psychiatrist can be beneficial. Physicians concerned with patients' mental well-being should also consider referral to properly trained specialists in cosmetic camouflage to diminish or disguise facial or other disfigurements.[44]

The effect of skin diseases is considerable and underappreciated. Physicians applying the biopsychosocial model to skin diseases will be rewarded with improved therapeutic alliances and with grateful patients who experience improved quality of life.

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Competing interests

None declared

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Editor's key points

- This article describes the psychosocial effects of three skin diseases: acne, atopic dermatitis, and psoriasis.
- These diseases frequently result in psychological problems (eg, depression, anxiety, and isolation) and in social problems as well (eg, unemployment and temporary disability).
- Family physicians can offer several effective treatments for skin diseases and can reduce the diseases' psychosocial consequences by offering counseling and appropriate treatments.

Points de repère du rédacteur

- Cet article de formation continue décrit les impacts psychologiques de trois maladies dermatologiques: l'acné, la dermatite atopique et le psoriasis.
- Ces problèmes fréquents ont des conséquences importantes sur le plan psychologique (ex, dépression, anxiété, isolement social) et sur le plan social (ex, chômage, invalidité temporaire).
- En plus de prescrire des traitements efficaces pour ces problèmes dermatologiques, le médecin de famille doit être à l'affût des impacts psychologiques et sociaux pour offrir un counseling et un traitement approprié.

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