

Cost-effectiveness in Psychodermatology: A Case Series

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Patients with psychodermatological problems are numerous, and can be challenging to manage within the constraints of general dermatology clinics. Despite this, psychodermatology services remain limited in the UK and globally. A study in 2012 found that only 6% of departments in the UK had a dedicated psychodermatology service (1). Commissioners may be reluctant to fund such multidisciplinary services, perceiving them to be costly. This case series, along with two other published studies, shows the reverse to be true (2, 3).

METHODS

We aimed to study the direct healthcare costs associated with caring for 4 typical patients with a range of diagnoses in our psychodermatology service. We used nationally-agreed tariffs to estimate the costs of primary and secondary care consultations, investigations and treatments prior to referral, and compared this to the costs incurred within the psychodermatology service (Table I). At the time that the patients were cared for, our service comprised a consultant dermatologist conducting joint patient assessments with a senior clinical psychologist. Limited in-house psychological therapy was available thereafter if indicated, but we had to refer on to separate local psychiatric services if this was deemed necessary.

RESULTS

Patient A presented with episodic hair loss and was eventually diagnosed with trichotillomania. Prior to referral, her care was estimated to have cost £1,209 (€1,347). She was assessed in the psychodermatology service and received a short course of psychological therapy, costing £386 (€430) in total. This led to acceptance of her hair-pulling and resulted in resolution of her symptoms.

Patient B was referred to dermatology with multiple large bullae and erosions. She also reported a myriad of

other complaints including widespread pain, visual loss, headaches, weakness, incontinence, twitching, recurrent abdominal pain and dyspnoea. She had been thoroughly assessed by multiple departments over 5 years. She was eventually diagnosed with factitious skin disease and medically unexplained symptoms. Prior to referral, the cost of investigating and treating her skin complaint was £5,555 (€6,190). A conservative estimate of the cost with regard to her additional symptoms was £14,979 (€16,692). Psychodermatology input, costing £218 (€242), helped her to identify that her predominant problem was with her mental health and she agreed to psychiatric referral. This resulted in marked improvement in both her skin and other symptoms, including regaining of some of her vision, allowing her to be discharged to psychiatric services.

Patient C presented with painful, non-healing erosions which he attributed to tick bites. He had amassed an extensive collection of samples and had consulted a number of clinics around the region. He was diagnosed with delusional infestation and was referred to the psychodermatology clinic where he has been started on risperidone. The cost of his care prior to referral was £2,892 (€3,223). Within the psychodermatology service, his care has so far cost £464 (€517) and he is now making good progress. As he is likely to be within the service for more than a year, we can compare annual costs for this patient. Prior to referral his care cost £1,928 (€2,148) per annum, and within psychodermatology it is projected to cost £546 (€608) per annum. This is a cost-saving of £1,382 (€1,540, 72%) per annum.

Finally, patient D presented with a 7-year history of intractable eczema on her pinnae. She was about to commence ciclosporin when, after admitting to extensive scratching, she was referred to the psychodermatology clinic. Habit reversal therapy was introduced which led to a resolution of her eczema and she was discharged.

Table I. Summary of healthcare-related costs in 4 typical patients with psychocutaneous problems

	A Trichotillomania	B Factitious skin disease	C Delusional infestation	D Habitual scratching
General practitioner appointments	3	14	5	0
Dermatology – new outpatient appointment	3	1	4	3
Dermatology – follow-up outpatient appointment	3	2	9	6
A&E attendance	0	0	2	0
Other specialty outpatient appointment	0	2	4	67
Biopsies	1	2	2	0
Psychodermatology – new outpatient appointment	1	1	1	1
Psychodermatology – follow-up outpatient appointment	0	1	4	3
Psychology sessions	5	0	0	0
Cost before	£1,209 (€1,347)	£5,555 (€6,190)	£2,892 (€3,223)	£9,222 (€10,277)
Cost after	£386 (€430)	£218 (€242) (+psychiatry costs)	£464 (€517)	£382 (€425)

Prior to referral £9,222 (€10,277) had been spent, across otolaryngology and dermatology. The cost of her psychodermatology input was £382 (€425).

DISCUSSION

In 2012, a British Association of Dermatologists' Working Party Report on minimum standards for psychodermatology services was published (4). This recognised that there is a high level of psychological distress and psychiatric disorders amongst dermatology patients, and found that there is an unacceptably low level of service provision for these patients. They recommended that patients with psychocutaneous disorders are best treated in dermatology departments by dermatologists with expertise in psychodermatology, operating in conjunction with an integrated multidisciplinary team.

The All Party Parliamentary Group for Skin published a report on the psychological and social impact of skin disease in 2013 which highlighted that skin disease is very common and has an extensive impact on many aspects of life (5). They also found that there was a lack of dedicated services to address the psychological needs of patients, and concluded that commissioners should be alerted to the potential financial benefits of psychological intervention. They also recommended that further research should be conducted to establish the cost-effectiveness of psychodermatology services.

Two previous studies have investigated the cost-effectiveness of psychodermatology clinics with regard to individual conditions. In 2012, Aktar et al. (2) found that for 10 patients with factitious skin disease, the mean cost of care within the psychodermatology clinic was £1,210 (€1,348) per patient per annum, compared with £8,063 (€8,985) per patient per annum beforehand. In 2016, Altaf et al. (3) found that the mean costs of caring for 8 patients suffering from delusional infestation reduced from £854.78 (€952.56) per patient per annum to £359.12 (€400.20) per patient per annum when cared for in a multidisciplinary psychodermatology service.

Our study further contributes to this body of evidence by demonstrating that significant cost-savings are possible across a range of psychocutaneous diagnoses. Firm conclusions regarding the cost-effectiveness of psychodermatology services cannot be inferred from this short cherry-picked case series. Nonetheless, an indication is given of the potential cost-savings which may be realised across the regional health economy and beyond. Of far greater importance is the opportunity to offer high-quality, integrated, multidisciplinary patient care therein. Since this study was conducted, our service has been able to expand to secure permanent funding for two clinical psychologists, both of whom are able to offer individualised psychological therapy for those patients who may benefit from it. We have also recruited a sessional consultant liaison psychiatrist to allow all aspects of care to be delivered in-house. We therefore anticipate that the clinical- and cost-effectiveness of our service both now and in the future is likely to have been further enhanced.

The authors declare no conflicts of interest.

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