

Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/101526/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Finlay, Andrew Yule ORCID: <https://orcid.org/0000-0003-2143-1646> 2017.
Every dermatology consultation: think adherence [Editorial]. *British Journal of Dermatology* 176 (3) , pp. 558-559. 10.1111/bjd.15250 file

Publishers page: <http://dx.doi.org/10.1111/bjd.15250>
<<http://dx.doi.org/10.1111/bjd.15250>>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies.

See

<http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



29th October 2016

BJD Editorial

1199 words,
14 references

Invited editorial for BJD

Andrew Y Finlay
Department of Dermatology and Wound Healing
Institute of Infection and Immunity
Cardiff University School of Medicine,
Heath Park,
Cardiff CF14 4XN
UK

Email: FinlayAY@cf.ac.uk
Telephone: 07860 112639
ORCID number: 0000-0003-2143-1646

Every dermatology consultation - think adherence

“What would you like to help you daily treat your skin? We can offer a regular text reminder, or arrange a friend of yours to encourage you on Facebook, or you could join our free *Treatment Treats* scheme (you earn ten points each time you put the treatment on!). Or, right now, you could go for a five minute *Treatment Success* tutorial with our specialist nurse to discuss the best ways to squeeze your treatment into your hectic life.” Crazy ideas? Maybe, but somehow clinicians need to wake up to the invisible sea of non-adherence that they are floating in.

About 95% of dermatology patients under-dose when using new topical therapies¹ and 30% didn't even pick up their outpatient prescription drugs². There are even problems with adherence for inpatients despite direct supervision by the care team³. In acne, there is an overall risk of poor adherence of 50%⁴. Why does non-adherence matter? Because lack of use of prescribed therapies results in lack of effectiveness, with resulting prolongation of time to improvement or cure and wasted clinic appointments. Furthermore, there is dissipation of scarce resources and clinicians get an inaccurate understanding of the appropriateness and effectiveness of the advice they gave.

In this issue, Alinia et al⁵ examine long term adherence to topical medication and demonstrate that it is “abysmal”. Their's is a critical exposé, striking at the heart of one of the main tenets of clinical practice. They used a Review Board-

approved technique of using ointment medication containers with hidden electronic monitoring, and were able to follow-up 20 patients for a full 12 months. Even in the first month, no medication was used on 37% of days; by month 12, none was used on 51% days. Patients in an intervention comparison group were asked to report weekly on the state of their disease: interestingly, even this modest patient engagement technique was associated with improved adherence.

What does any of this have to do with the practice of dermatology around the world? Firstly, we must recognise that patients often don't use therapy in the way that we advise. Secondly, although tempting to think that we improve this with a mixture of persuasion, encouragement and warnings, we need to open our minds to understanding poor compliance. Thorneloe et al⁶ have shown that the reasons behind non-adherence are complicated and subtle. Their detailed interviews with 20 patients with psoriasis revealed the reality, and often impossibility, of trying to integrate regular therapy with their daily lives. Daily treatment adds extra distress, and non-adherence may be a deliberate way for a patient to try to regain some personal control. Unless you understand a patient's mood and beliefs, your strategy for improving adherence will probably fail.

Erntoft et al⁷ recently gave another insight into non-adherence, in treatment of actinic keratoses. Using a strict definition of adherence, they showed a more encouraging level of adherence, with 75% adherent to both recalled frequency and regularity of topical treatment. They identified a group of "over-persistent" patients who stayed on treatment longer than suggested, presumably because they were so keen to get some therapy benefit, or maybe they wanted to give the therapy maximum chance of working before abandoning it. So poor adherence doesn't only mean too little therapy.

Thus, we have good evidence that many of our patients don't apply their topical preparations as advised and that some don't even get their medications from the pharmacy. Recognising this, why are clinicians apparently unaware of this problem? Are the detailed realities of life of our patients, as revealed by the Thorneloe et al's powerful patient quotes⁶, beyond our understanding? If not, how can we clinicians hope to better understand the complexities and barriers to good compliance in our patients?

It would be helpful clinically if adherence could be easily measured. The problem, let's be frank, is that patients do not always accurately report their therapy usage (they're often "economical with the truth"⁸). There is considerable experience of this from clinical trials where even self-completed diary entries are sometimes falsified. That's why in the research context the techniques described in this issue by Alinia et al⁵ of covert electronic monitoring of therapy treatment containers is exciting. It is possible to imagine that the use of such electronic devices could be used overtly to assist patient adherence. But is there any way now that you can recognise who is likely to be a poor adherer? We suggested that, at follow-up, asking the simple non-threatening question "What treatment did you use yesterday" might alert one to a problem of adherence and anyway open up the subject for discussion⁹: but there is no actual

evidence for this. In psoriasis, younger, male patients with early onset of psoriasis and high self-assessed severity of psoriasis experienced adherence issues¹⁰, but it is probably better to assume at first with all patients that adherence may need to be supported, until proven otherwise.

What can be done to make regular treatment easier for patients and to motivate them to actually use their drugs? When using systemic drugs, the prescribed number of doses per day is inversely related to compliance¹¹. **It therefore** makes sense to also prescribe topical therapy on a once-only daily basis, if there is a choice. The physician-patient relationship is a primary determinant of adherence¹². Understanding and acting on patient preference, providing appropriate patient education and adjusting the treatment regimen to suit the individual are all important¹².

Finally, there is **a** mostly unexploited resource available that could make a huge difference to adherence: the “Greater Patient”¹³. Skin disease doesn’t only affect the life of the patient, it can also have a major impact on the quality of life of the patient’s close relatives or partner^{13,14}. **T**here is often at least one person close to the patient who would gain if the patient’s condition improved; **t**hat person is likely to be easily motivated to assist good treatment adherence. If a close relative could be encouraged to take on this role (of course with the patient’s permission and support), then the “Greater Patient” team could be jointly educated with targeted adherence discussion and advice. Joint family education programmes have been effective in the management of childhood eczema and this concept could be built upon for other skin diseases.

So after reading this, at your next clinic, **and** at every consultation try thinking about adherence. You’ll be an even more effective clinician.

Acknowledgement

I wish to thank Dr Anthony Bewley for kindly reviewing this manuscript.

Conflicts of interest

There are no conflicts of interest. There was no funding for this editorial.

A.Y. FINLAY

Department of Dermatology and Wound Healing, Division of Infection and Immunity, Cardiff University School of Medicine, Heath Park, Cardiff CF14 4XN, U.K.

E-mail:finlayay@cf.ac.uk

ORCID: 0000-0003-2143-1646

References

1. Storm A, Benfeldt E, Andersen SE, Serup J. A prospective study of patient adherence to topical treatments: 95% of patients underdose. *J Am Acad Dermatol* 2008; **59**:975-80.
2. Storm A, Andersen SE, Benfeldt E, Serup J. One in 3 prescriptions are never redeemed: primary nonadherence in an outpatient clinic. *J Am Acad Dermatol* 2008; **59**:27-33.
3. Hallai N, Finlay AY, Godfrey J *et al.* Inpatient compliance of topical applications. *Br J Dermatol* 2005; **153**: 446-448.
4. Dréno B, Thiboutot D, Gollnick H *et al.* Large-scale worldwide observational study of adherence with acne therapy. *Int J Dermatol* 2010; **49**:448-56.
5. Alinia H, Moradi Tuchayi S, Smith J *et al.* Long-term adherence to topical psoriasis treatment can be abysmal: A one-year randomized intervention study using objective electronic adherence monitoring. *Br J Dermatol* 2016 XXXXX
6. Thorneloe R, Bundy C, Griffiths C *et al.* Non-adherence to psoriasis medication as an outcome of limited coping resources and conflicting goals: findings from a qualitative interview study with people with psoriasis. *Br J Dermatol* 2016 XXXXX
7. Erntoft S, Norlin JM, Pollard C, Diepgen TL. Patient-reported adherence and persistence to topical treatments for actinic keratosis: a longitudinal diary study. *Br J Dermatol* 2016 XXXXX
8. Burke E. Letters on a Regicide Peace 1796. Quoted by Sir Robert Armstrong, Spycatcher trial, New South Wales, Australia, 1986.
9. Belgi AS, Finlay AY. The yesterday use question to assess adherence with therapy in dermatology out-patients. *Br J Dermatol* 2005; **153 (Suppl 1)**: 47-48.
10. Devaux S, Castela A, Archier E *et al.* Adherence to topical treatment in psoriasis: a systematic literature review. *JEur Acad Dermatol Venereol* 2012; **26**: 61-67.
11. Claxton AJ, Cramer J, Pierce C. A systematic review of the associations between dose regimens and medication compliance. *Clinical Therapeutics* 2001; **23**: 1296-1310.
12. Feldman SR, Horn EJ, Balkrishnan R *et al.* Psoriasis: improving adherence to topical therapy. *J Am Acad Dermatol* 2008; **59**: 1009-16.
13. Basra MK, Finlay AY. The family impact of skin diseases: the Greater Patient concept. *Br J Dermatol.* 2007; **156**:929-37.
14. Eghlileb AM, Davies EE, Finlay AY. Psoriasis has a major secondary impact on the lives of family members and partners. *Br J Dermatol* 2007; **156**:1245-50.

