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BJD editorial: The management of acne in primary care

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Acne vulgaris (or just "acne", as most general practitioners (GPs) and patients refer to it) is common, affecting up to 80% of people at some point, predominantly between the ages of 15 and 17 years.¹ In countries with strong systems of primary care such as the UK, it is one of the "top three" long-term, inflammatory skin conditions diagnosed and managed by family physicians.² In this setting, as well as being able to prescribe treatments that are effective for the majority of patients, GPs can provide on-going support, because all treatments take time to work.³ Concerns about rising antimicrobial resistance means primary care guidelines discourage the use of topical and oral antibiotic and encourage the use of non-antibiotic therapies either in combination or for longer-term treatment.⁴ Despite this, remarkably little is known about how such patients are managed in primary care.

Therefore the linked study by Francis and colleagues is welcome. Using the UK's largest primary care electronic medical records (EMR) database, they analysed consultations and prescription data of 318,535 patients (8 years and older) over a 10 year period (2004-2013). In doing so, they not only provide some much needed answers to some basic questions (such as, how often are people with acne seen in primary care and what treatments are most commonly prescribed?), but they also give us insight into how these patterns have changed over time. By grouping patients into one of nine groups, they describe how prescribing patterns change both within patients but also between patients over time.

So what did they find? First, consultation rates for acne in primary care are stable, being highest among 12-18 year olds but lower overall (934 000 per year) than previously estimated. In addition, most "new" patients with acne are not followed-up (only one-third in this study were seen in subsequent 12 months). Second, prescribing does not follow expected patterns. 26.7% of patients were not prescribed anything at their "index" consultation, and 12.9% received nothing over the period 2004-2013. When prescriptions were issued, most amounted to 2-3 months' worth of treatment and antibiotics (oral, topical or in combination) were the mostly frequently prescribed treatments. Third, prescribing habits have changed – with lymecycline and clindamycin/benzoyl peroxide combination products becoming the most common oral and topical agents respectively, and the majority of other oral antibiotics decreasing.

This is the most informative study of its type to date. However, these studies such as these rely on the clinician seeing the patient to accurately "code" for each condition seen. The average GP deals with 2.5 problems in each ~12 minute consultation, and only a third of problems discussed may be entered into the EMR as a code.⁵ Therefore, forgetting to enter the appropriate acne code, entering free-text information about the condition when it is discussed as one of several problems or using an acne code as a descriptive rather than a diagnostic term, means figures on both re-consultation rates and prescribing for "acne" may both be inaccurate. While primary care EMR data on prescriptions is usually reliable, in the present study the findings are subject to the choice of "acne diagnosis" as the denominator throughout.

The other methodological challenge with this type of data, where one has variable amounts of follow-up data for participants, is deciding which timeframe to study. Francis et al make the reasonable decision to study prescribing and consultation patterns in relation to a "new acne consultation", defined as no primary care consultations/prescriptions for acne in the year prior to

their index consultation (and at least a year of follow-up data). This decision however may have implications for the results on older age groups. For example, a 30 year old patient who was included by virtue of their first, "new" consultation in 2004 could have had a series of consultations before this time and so the lack of prescriptions and follow-up for this individual may be less significant than for a 12 year old for example. My interpretation is that the findings of this study are strongest for participants 18 years old or younger, because this is when the majority of people first present to their GP.

What do the findings of this study mean for future research and clinical practice? The figures in this paper, for example on the average number of consultations for acne for an typical GP surgery, are extremely valuable to researchers trying to determine the feasibility of recruiting patients from primary care into a trial of acne treatment. Future research should aim to investigate consultation patterns and prescribing in relation to disease severity, the use of over-the-counter products and referrals to specialist clinics. A better understanding of the role of combined (COC) and progesterone-only (POP) oral contraceptives is also needed. While the majority of women will be using them for birth control or to manage menstrual problems, a significant number may have problems with the skin due to, or be benefitting from, the use of POP or so-called "skin friendly" COCs respectively. Their use may be related to Polycystic Ovarian Syndrome, a group of patient with acne who have quite different needs and treatment options.

Meanwhile, these findings should prompt clinicians working in primary care to review their prescribing habits and make changes to ensure that they are in-line with current guidance. While the high use of oral antibiotics in this study may be a marker of disease severity, the concern is that other non-antibiotic options may have been more suitable for the majority of people with mild or moderate acne. However, the psychological and social impact of the condition can be significant and may be underestimated by both GPs and dermatologists.⁶ The majority of people with acne do not seek medical attention, instead using over-the-counter and "cosmetic" treatments.² So, when they do arrive in a GP's consulting room, doctors should be mindful that this is probably a significant sign – of either the concern or distress that their spots are causing them. Pro-actively following-up these patients, rather than leaving it to the person consulting to make the appointment "if needed", may be one way that primary care clinicians may be able to provide emotional support as well as monitoring treatment use and effectiveness.

Conflicts of interest: I have previously collaborated with NF on the CREAM trial. I am collaborating with NF and MS on the BATHE trial. I am co-applicant on an application for funding of a trial of a treatment for acne which being led by MS & AL (to which NF & EAE are also co-applicants).

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