General practitioners' attitudes towards acne management

Psychological morbidity and the need for collaboration

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Background
Decisions about effective treatment and referral of patients with acne vulgaris can be complicated by psychosocial effects on patients.

Objective
The aim of this study was to investigate the complexities of diagnosis, treatment and referral decisions for general practitioners (GPs) providing care to patients with acne.

Methods
A qualitative descriptive study collected data via telephone interviews with 20 purposively sampled GPs working in New South Wales. A thematic analysis guided by the study objectives was undertaken.

Results
The participating GPs had divergent management approaches to acne treatment, infrequently provided acne patients with written resources, and would value additional dermatological support. Furthermore, the GPs recognised psychosocial ramifications and patient distress as drivers for treatment and expedited referral to dermatologists.

Discussion
Avenues for improved patient outcomes include explicit attention to psychological morbidity beyond treatment of the acne itself and improved use of patient educational materials, along with consistent collaboration between GPs and dermatologists.

ACNE, a common chronic inflammatory skin condition involving the pilosebaceous unit, is characterised by eruption of comedones within follicles.[1,2] Treatment goals for acne management include scar prevention, reduction of psychological morbidity, and resolution of lesions.[3–5] Current guidelines advocate topical agents for treating mild to moderate cases and oral isotretinoin for moderate to severe cases.[3,6] Even though oral isotretinoin (13-cis retinoic acid) is the most effective treatment for severe acne or acne refractory to treatment, its use is tightly regulated because of its teratogenic effects, and it is therefore only available in Australia through referral to dermatological specialist care.[7]

Kilkenny et al reported that 97.8% of boys and 89.8% of girls aged 16–18 years had head and neck acne, of which 24% was determined to be of moderate-to-high severity according to an Acne Disability Index.[8] During recent decades, better access to treatments has reduced scarring in acne patients.[9,10] However, in 2017 acne is still reported to affect more than 90% of Australian adolescents aged 16–18 years.[9] According to the evidence, severe acne lesions can have a negative impact on adolescent wellbeing because they can lead to social isolation, a decrease in self-esteem and an increase in anger, and are significantly correlated with suicidal ideation.[11–16] Further, these psychosocial ramifications may not be isolated to adolescents, with the rising prevalence of females >20 years of age with acne.[17,18]

Since the psychosocial ramifications of acne vulgaris can negatively affect a patient's quality of life, early and effective acne treatment is important.[11–18] An Australian study that undertook a clinical audit involving 85 general practitioners (GPs) who had treated 1638 patients identified considerable divergence in the treatment of severe acne and revealed scope for improvement in their management of acne.[4] Subsequent to this study, little information has been published about how Australian GPs tailor their approaches to acne management in terms of treatment effectiveness, monitoring and early interventions to prevent scarring and minimise psychosocial ramifications.

With a view to informing practice to improve patient outcomes, the aim of this investigation was to explore the complexities of diagnosis, treatment and referral decisions for GPs providing care to patients with acne vulgaris in the general practice setting in New South Wales (NSW).

Methods

A qualitative descriptive methodology was used. Qualitative descriptive methodology is useful when investigating professionals' first-hand experience with a particular topic[19] and is recommended for developing a practical, factual approach to describe phenomena across health sciences.[20]

Setting and sample

This qualitative descriptive study used purposive sampling to recruit GPs and general practice registrars, who were members of Illawarra and Southern Practice Research Network (ISPRN).[21,22]

Data collection

Data were collected using 30-minute structured telephone interviews based on the questions presented in Table 1. Interviews were audio-recorded, de-identified and transcribed verbatim. A photographic image, portraying a patient with moderate to severe acne, was emailed to participants prior to their interview in order to assist with answering some questions. Unfortunately, the photographic image is unable to be published.

Analysis

Interview transcripts were read and re-read by two researchers to develop familiarity with the data. Initial coding was undertaken by hand directly onto hard-copy transcripts by each researcher. The two researchers then met and discussed their initial codes before each developed a full set of coding for all transcripts using an online qualitative data analysis program. Codes were reviewed by the larger research team.

An iterative process of theme development was undertaken, with the two researchers responsible for coding taking themes back to the data and testing for authenticity and consistency.[22,23] As the analysis was driven by the study objectives, and therefore did not require any high-level abstraction, themes remained categorical as opposed to conceptual. That is, the themes describe categories of findings within the data; they do not provide conceptual insights into the meaning of the data.

Ethics approval

The research was formally approved by the Human Research Ethics Committee (HREC approval number HE15/222), University of Wollongong.

Results

Characteristics of the 20 doctors who participated in the study, GPs (n = 15) and general practice registrars (n = 5) are summarised in Table 2. The majority of the participants practiced in rural and remote areas, and had more than two years of experience as a GP.

Three themes were developed to describe categories within the data:

1. The GP experience with acne patients
2. The complexities of treatment and referral
3. Moving towards better patient outcomes

Each theme is presented below and illustrated with direct quotes from participants.

GP experience with acne patients

All participants described the majority of their acne patients as being adolescent, and more often female. Some also treated young adult women and occasionally older patients.

Experience with acne varied. Participant 16 described experience with acne as 'very limited' and Participant 5 agreed it was 'not something I see frequently'. These participants did not have a lot of exposure to patients with acne and therefore did not see it as a usual part of practice. However, Participant 3 had more experience and confidence, stating, 'with acne problems, I always try to initiate the treatment myself'. Participant 14 attributed their confidence to having 'a really good relationship with the dermatologist ... I am very confident with treating'.

Most participants felt it important to broach the issue of acne with a patient regardless of the initial reason for the consult. Participant 6 reassured patients that 'it's okay to seek treatment ... a lot of people, I find, don't actually come in to talk about their acne, but you can actually pick it up and be proactive ... they sort of don't realise that there is a lot of treatment options out there'.

Participant 2 explained that patients who did present specifically seeking acne treatment might have 'just had their first bit of acne ... or they've tried a couple of things and they want to upgrade because it's not working'. If acne was not the primary reason for presentation, immediate treatment initiation was often limited by time constraints. When this was the case, Participant 10 would say, 'look, I've noticed acne and you probably need to do something about it because it can lead to scarring ... so come back and see me'.

The majority of participants took a hierarchical approach to managing less severe cases of acne, beginning with the exploration of the different approaches undertaken by the patient, and directing

Table 1. Telephone interview questions

Interview questions
1. How many years have you been practising in general practice?
2. What kind of patients do you see with acne?
3. Can you tell me your experience of treating acne in general practice?
4. How do you find patients respond to treatment?
5. Do you recommend any resources?
6. (Referring to photograph) Can you tell me how you would treat this type of patient?
7. What factors do you take into consideration when referring a patient to a dermatologist?
8. (Referring to photograph) Can you tell me about the last patient that you saw that had acne like this and what happened in the case?
9. (Referring to photograph) How would you manage this patient if they were very psychologically distressed about acne scarring?
10. What do you think would be the ideal working relationship between yourself and a dermatologist?
11. Do you think there is anything that dermatologists can do to assist with optimal isotretinoin treatment?

treatment from there. This approach was described by Participant 11 as starting 'with simple topical stuff as an initial discussion and move from there, so I guess not everyone responds to the simple topical stuff … if I've seen them once, I will see them for two or three consultations about the same thing to try different things before we manage to get it nailed'.

Participant 15 explained that 'if at the three-month mark … I have hit a roadblock and it's not working at all, then I contact the dermatologist'. The majority of participants considered dermatological care to be integral to successful treatment for moderate to severe acne.

Complexities in treatment and referral

Divergent ideas about the success of treating less severe acne with topical creams or antibiotics were revealed. Participant 14 commented, 'I honestly don't have much faith in topical treatment', wondering if 'there is an element of patient compliance, or they just don't work'. Poor compliance was perceived by some to hinder treatment success. Participant 6 argued that 'at the simple end of the spectrum, a lot of people don't comply and then end up with fairly severe acne'. Some, such as Participant 16, thought gender played a part in compliance, suggesting that 'boys will often come back because they haven't been bothered to be compliant with treatment at all'. Participant 2 seemed to agree, commenting that 'mostly females are the ones that are more aware' and that female patients 'look after their skin and appearance more than guys [do]'.

When viewing a photo provided by researchers, there was majority agreement that the case presented was severe and escalating treatment to dermatologist care was a priority. It was considered by Participant 6 to be 'at a reasonably serious end of the spectrum, so even if I started … on antibiotic treatment, I would be saying I want you to go and see a dermatologist with a view to escalating treatment'. Discussing escalation, Participant 3 explained that 'if we escalate people inappropriately, we've lost nothing, but if we don't escalate someone who then subsequently scars, then we have lost something'. Similarly, Participant 19 believed that because acne 'is detrimental to daily life it warrants an urgent appointment'.

This perceived urgency was reflected among the majority of participants who recognised that the most effective treatment for distressing or severe acne was ultimately via dermatologist referral. It was considered that referral should be expedited if distress was perceived to be present. For Participant 7, 'their level of distress is the thing that drives [acne] treatment'. Participant 10 thought 'the best solution to get rid of the stuff [acne] is eventually from the dermatologists … I get them in as soon as possible'. This was supported by Participant 13, who said 'basically, when you know someone is distressed or anxious about their acne, you really want to get something happening pretty quickly'.

The primary motivation for patient referral to dermatologist care was to enable access to oral isotretinoin treatment. Dermatologist involvement in the process of managing acne using isotretinoin was considered warranted by most participants given the side-effect profile of the medication. Participant 3 felt that with the 'side effects … I usually leave it for the dermatologist and ask for their opinion'. Similarly, Participant 5 believed that 'at this point in time, with the knowledge that I have, I'd rather have specialists involved in prescribing … I'm sort of very happy where it is pitched at the moment'. One participant suggested that given appropriate training and collaboration, GPs could prescribe isotretinoin in the future, but most preferred the current level of dermatologist involvement.

There was consensus that attention to patient psychological wellbeing was an integral component of successful ongoing care. Some participants indicated that they spent considerable time weighing up treatment options and reflecting on the long-term, potentially detrimental effects of acne. Participant 10 believed that 'psychological distress can be one problem … but scarring can be for a lifetime. I spend a significant amount of time in my work with people who have psychological distress from a range of things, and scarring is one of the things'. However, apart from expedited referral to dermatologist care, few participants communicated a systematic approach to dealing with psychological morbidity in acne patients. Instead, Participant 11 'would probably go through the usual psychological process … and try to get to the bottom of how much this [acne] is disturbing her emotional state'. Participant 2 recommended that in addition to referring to a dermatologist for severe acne, they would 'also refer … to a psychologist', while Participant 16 suggested 'on-the-spot counselling' and Participant 18 explained that, depending on the level of patient distress, 'I would recommend a mental health program'.

Complexities also existed at the patient level. Participant 10 acknowledged that some patients 'just do not want to see a dermatologist', especially when 'the cost is humungous' and waiting times are long. Participant 11 perceived these barriers as 'a significant deterrent for young people'. Geographical isolation was also identified as a barrier for patient access to dermatologist care. Participant 7 found it 'quite difficult … getting people in to see the dermatologist', and Participant 3 described it as 'frustrating for us here because … referral for dermatologists has reasonable delays … so it's not something you can just do at the drop of a hat'.

Table 2. Participant characteristics

Participant characteristics		n	%
Gender	Female	11	55
	Male	9	45
Practice	Rural	7	35
	Regional	7	35
	Metropolitan	6	30
Experience (years)	>5	9	45
	2–5	6	30
	<2	5	25

Moving towards better patient outcomes

A few participants identified increased communication regarding the treatment process as a means to improving compliance and patient outcomes. Participant 15 indicated that success with topical treatments could be improved by raising patient awareness about acne 'if you explain to them what acne is, why it is happening and how to treat it'. Participant 10 believed that if you explained 'the rationale behind our treatments and that you only expect 10% improvement per month and that obviously compliance is really important, generally I find people do really well'. This doctor had also developed a patient educational resource 'that talks about some skin products to use and how to appropriately use the creams that I prescribe'. Rather than providing printed patient educational resources, some participants referred patients to health education websites, such as the Better Health Channel (www.betterhealth.vic.gov.au) or www.acne.org and therapeutic guidelines, or simply downloaded online factsheets from these websites.

Many participants expressed the desire to work closely with dermatologists using a team-based approach, and to increase their own knowledge of acne management through education and professional development. Participant 3 described the ideal working relationship 'is when dermatologists ... involve people in the monitoring and compliance, so we have a more team-based approach'. Participants discussed the benefit of good communication with dermatologists to help negotiate optimal management plans. Participant 7 valued arrangements where 'local dermatologists are happy to help with management issues, even if they don't have availability to see patients all the time'. Indeed, ready access to dermatologist advice was considered valuable by most. Participant 9 thought 'if they [dermatologists] can give us some suggestions until they [patients] go and see them, that would be good, because they are also very busy and acne is not life-threatening, but psychologically it is very difficult for some patients'.

Discussion

Our findings suggest there was some complexity, and a good deal of variation, in GPs' approaches to the diagnosis and treatment of acne, as well as to decisions about referral. Some of these complexities were based in differences regarding practitioner experience and confidence, some were associated with beliefs about efficacy of treatments and patient compliance, and some related to practitioners' perceptions of patient-level barriers to dermatological review.

However, one complex aspect of decision-making about dermatological referral was consistent across the sample: the need for urgent review when psychological distress or scarring were present for the patient. All GPs agreed that the psychosocial implications of acne could be serious and should be attended to as an integral part of acne treatment. However, there was significant variation in practitioner views about how to respond to psychological distress and – given the agreed importance of the issue – little was revealed about how patient distress was identified or assessed by individual practitioners.

Our results show some divergence from the work of Magin et al, who conducted semi-structured interviews with 65 patients who had acne, psoriasis or atopic eczema, and found that GPs and dermatologists had poor comprehension of the psychological implications of skin diseases.[24] Our findings indicated GPs certainly recognised the psychosocial ramifications, and patient distress was a driver for treatment and expedited referral to dermatologists. This could be interpreted as an encouraging sign that awareness of the psychological implications of skin disease has improved. However, it appeared that while GPs were cognisant of the problem, a well-defined, empathetic and ongoing approach to assessing acne patients' psychosocial wellbeing was not in use and should be considered.

Routine clinical use of the freely available, well-validated Dermatology Life Quality Index (DLQI) questionnaire may help GPs assess the impact of patients' acne on their quality of life, with a score of >10 (from a maximum of 30) indicating a very large effect on the patient's life.[25] Ideally, this assessment would be included in communication with the consulting dermatologist and, in some situations, appropriate referral to a mental health professional or program. The DLQI can also be used to measure improvement in a patient's quality of life in response to treatment, with a change in score of four points considered a clinically meaningful change.[26]

A number of GPs identified lack of patient compliance as a hindrance to treatment success. However, despite evidence that increasing the quality and quantity of the information during a consultation can help to improve compliance, dispel myths and improve self-management,[26,27] only a few GPs discussed providing their patients with additional written information. In light of these findings, we recommend GPs provide good-quality educational materials to their patients presenting with acne. There are excellent evidence-based websites designed as educational resources and created by dermatologists. These provide factual and practical information for all individuals affected by acne, as well as health professionals who provide care to people with acne. Other websites written by physician authors, editors and peer reviewers provide a breadth of health information, with topics updated as new evidence becomes available.[28]

Further research may include similar exploratory studies focusing on the dermatologist and the patient perspective in the context of the current findings. A broad depth of perspectives could then be used to enhance assessment and communication of patient psychological distress, improve patient understanding and assist in rapid referral.

Limitations of this study include the risk of bias inherent in purposive sampling, the small sample size, and the fact the study was conducted in a relatively small geographic region in NSW. Nevertheless, the gender mix, range of GP experience and metropolitan, regional and rural locations provide valuable insight for the study findings.

Implications for general practice

The findings from this study highlighted a number of avenues for improving the care of patients with acne in general practice. These include explicit attention to, and assessment of, psychological morbidity beyond treatment of the acne itself, and improved use of patient educational materials.

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