PCR251

Understanding Heterogeneity in Patient Preferences for Psoriasis Treatments

A Qualitative Grounded Theory Study

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BACKGROUND

- Individual patients vary in their preferences for specific attributes of treatments, risks, and health outcomes.[1-3]
- However, patient preferences – and the heterogeneity in these – are not typically directly considered in cost-effectiveness analysis or health technology assessment (HTA) decision-making.[4-6]
- In plaque psoriasis, heterogeneity in stated preferences has been demonstrated using discrete choice experiments, which have identified demographic and clinical factors associated with preferences for specific treatment attributes.[7]
  - While these methods are valuable for providing numeric mean preference values, they can provide less insight into the broader contextual factors that influence preferences or the mechanisms that underlie these.

OBJECTIVE

- **To provide an in-depth understanding of how preferences are shaped and constructed, by exploring real-world heterogeneity in preferences for psoriasis treatments and the mechanisms underlying these.**
  - **This understanding will potentially facilitate discussions between patients and physicians and help to improve study design and technology assessment.**

METHODS

- Between Oct 2023 and Sept 2024, 24 Canadians with moderate-to-severe plaque psoriasis engaged in one-to-one, semi-structured interviews.
  - Participants were selected purposefully to reflect a diversity in treatment experience.
  - Informed consent was obtained prior to the interview.
- Interviews lasted 1 hour, were audio-recorded and transcribed.
  - Participants described the impact of psoriasis on daily life; treatment experience and preferences; and their perceptions of the impact of their own personal views and that of their care team on treatment.
- Interview transcripts were coded in NVIVO using the constant comparison technique to construct a grounded theory; an approach well-suited to establishing data-driven theories to explain variation in human experience.[8]
  - Data collection and analysis were performed in parallel.
- Coding was iterative and first applied line-by-line; codes were arranged into preference categories and mechanisms, and data reviewed across and between preference categories to better delineate the mechanisms underlying reported treatment preference.
- A conceptual model was developed to explain heterogeneity in patient preferences. This should be interpreted in the context of healthcare systems with private insurance or material copayments.
- This study was approved by the Western Copernicus Group Institutional Review Board (Canada) and the Ethics Committee of the College of Medical, Veterinary and Life Sciences at the University of Glasgow.

RESULTS

Participant characteristics

- Participant ages ranged from 25-66 years; 13 were female, 5 had moderate-to-severe symptoms at the time of the interview and 8 had received injectable biologics.

Preference categories

- Preferences for treatment aspects varied between individuals; and participants provided varying explanations for their preferences.
- We identified four preference categories: minimizing symptom burden, prioritizing safety, minimizing treatment burden, or alignment with other beliefs/priorities (Figure 1).
- While many participants wanted to minimize symptom burden (e.g. prioritized efficacy), some wanted to minimize treatment burden (e.g. taking a less invasive or frequent treatment).

"You name it, for psoriasis – I've done every medical and non-medical thing you can think of, but none of it has worked as well as [biologic]. So I'm such an advocate for it because it has such a positive impact on my life." – P06

"They had mentioned some different oral medications, but I wasn't a hundred percent sure… I just wanted to stick to the creams first. I wasn't really too keen on having to take too many medications, you know?" – P011

- Similar underlying preference categories could result in different preferred treatments among different people. While everyone wanted a 'convenient' treatment, some considered a daily pill ideal and others a monthly injection; according to what fits best into their current lifestyle.

"You probably don't hear this from many people, but after doing the injections now for a while…I would say I probably prefer an injection to an oral medication just because I don't have to think about it every day." – P03

"Because I'm a certain age… I'm already questioning my memory to begin with. So, it's like, 'Oh, did I take it… is it supposed to be today? Or did I take it yesterday? Or when…' No, gone; I don't need that hassle. I would take a pill every day with my morning vitamins or whatever, you know?" – P10

- The same treatment assignment could also result from two entirely different underlying preference categories. People favoring minimally-invasive treatments or with needle phobias, for example, would both avoid injectable biologics.

[From someone on topicals] "I want to feel like I'm in control of the psoriasis, not vice versa. Because me using pills and medication, I would take it at any time just to go, you know? Even if I'm rushing somewhere, I just take it and go. But for me to inject myself, it would almost make me feel like I have diabetes or something" – P13

Figure 1: Conceptual model illustrating the relationship between self-reported treatment, underlying treatment preferences categories, personal factors acting as effect modifiers, and mechanisms that moderate preferences

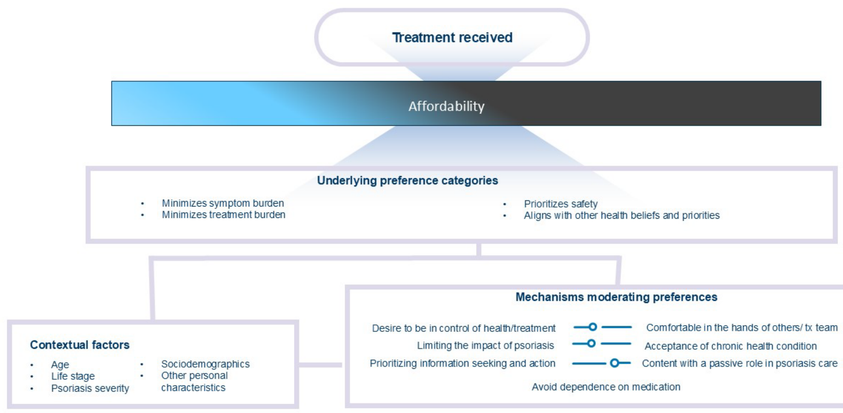
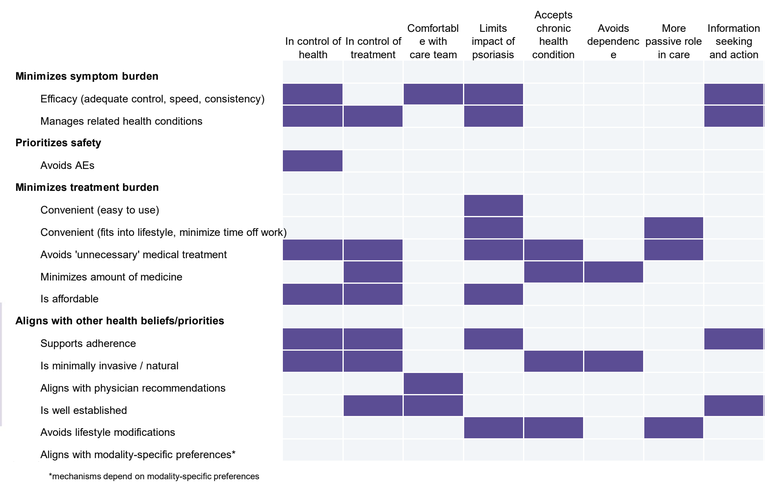


Figure 2: Mechanisms underlying treatment preferences, according to treatment preference category



Mechanisms

- Heterogeneity in treatment priorities and preferences are driven by differing underlying mechanisms (Figure 1, mechanisms). Mechanisms often reflected dichotomies between two conflicting viewpoints; for example
  - A desire to be in control of one's health vs. a high degree of comfort being in the hands of one's treatment team

"I haven't found anyone who really truly understands this condition. And I mean it's not something you can go ahead and tell everyone, 'I have this problem'. Yeah, I tend to manage it more on my own." – P013

"You have to trust your doctors at some point. I had a specialist … and this is what he was recommending. And, you know, that was his field of study. So I do what he says; you know, I think he knows what he's talking about better than I do." – P08

  - A desire to limit the impact of psoriasis vs. acceptance of a chronic health condition.

"I don't like giving myself a needle. I really hate it. But what I like is it's keeping things at bay. My arthritis isn't flared up as much, and neither is my psoriasis. So for that reason I like it, but I really don't like giving myself an injection, but I do what I have to do." – P12

If things are really highly internally stressful then I'm like, 'Okay, yeah, I'll do it [consider a more intensive psoriasis treatment]'…But then I just think 'Okay, it's just my skin. That's okay. I just need to accept my skin as it is' – P02

- The relationship between different preference categories and mechanisms is depicted in Figure 2.

Modifiers of preferences

- Affordability is a concern and driver of heterogeneity: While some participants had no concerns about affordability, others reported being unable to afford co-payments for treatments they would be interested in.

"Cost is such a huge barrier for what I think are really good treatments [bioloigics]...having drugs that are $20,000 [a year]… it's a lot of money….then you really start to question how severe your experience is, which I think isn't really healthy or good for patients, to try to convince themselves that they have a less severe illness than they actually have that doesn't require treatment." – P02

- Preferences varied according to psoriasis severity and life stage.

"When I was younger, I just would have done whatever I was told, but now I realize that it affects my body so much. You know, there's like side effects and things that happen with medications, and then you start to rely on them and then you can't get off them… I'd prefer to try to figure out on my own first before taking that medication." - P15

CONCLUSIONS

- Heterogeneity in patient preferences for aspects of psoriasis impact and treatment can translate into markedly different preferences for specific psoriasis therapies.
- Affordability is a concern for many Canadians with psoriasis, and these findings are relevant to health care systems with private insurance or material co-payments.
- A key strength of this study is that rather than considering hypothetical treatment scenarios, reported preferences are grounded in real-world treatment experience with treatments.
- These data complement and extend on existing quantitative research into psoriasis patient preferences by considering preferences more broadly than according to specific treatment attributes and exploring potential mechanisms that can explain how these are constructed.
  - Understanding the mechanisms underlying preferences can reveal how to better align available treatments to patient priorities at the population level, as well as improve an individual's utility while on treatment.

DISCLOSURES: The authors declare no conflicts of interest

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