

Breaking Out

A report on the acne patient experience in Canada



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SURVEY HIGHLIGHTS

The objective of the survey was to understand Canadian patient experiences with acne including acne onset, healthcare resource use, experiences with treatments and impact on quality of life. Of the respondents, 37% reported having mild acne, nearly half (47%) reported moderate acne and 16% indicated severe acne. Here is what we found:

Lasting effects of acne: The vast majority of respondents reported they have scarring and pigmentation due to their acne (87% and 90% respectively), representing significant, lasting and detrimental manifestations of acne.

Challenges in everyday life: The vast majority of respondents (97%) report struggling to control their acne with the most prevalent challenges being hiding acne, trying to identify triggers and out-of-pocket expenses.

Emotional impact: Half of the respondents reported they are often or always concerned that their skin will never clear up, while 44% often or always feel self-conscious due to their acne and one-quarter avoid social interactions regularly.

Experiences with the health care system

- Number of healthcare visits to get help: Almost half of respondents (42%) said they had between
 2 5 healthcare visits before being diagnosed and prescribed treatment.
- Rating medical care: While many (58%) were satisfied or strongly satisfied with medical care they received, nearly one-quarter were dissatisfied or strongly dissatisfied.

Treatment effectiveness and costs

- Treatment goals: Top reasons to undergo treatment were the ability to enjoy personal relationships, having less scarring and having fewer changes in skin pigment.
- Acne treatments: Isotretinoin pills were the most effective treatment option seen in the survey. Some 59% of respondents had used these pills, with 28% reporting significant improvement and 43% improving slightly. Hormone pills, including birth control and spironolactone pills, were the second most effective treatment option. Of 59% who used them, 23% had significant improvement and 36% had minor improvement.
- Financial burden of personal acne treatments: Facials and peels were used by 53% of respondents with 12% paying more than \$500 for each session. Some 65% of those surveyed used light or laser therapy with 15% spending more than \$500 each time.

SURVEY RECOMMENDATIONS

Increase access to new treatment options that are safe and effective.

Ensure health care providers who see patients with acne are aware of all new and existing treatment options.

Evaluate every patient with acne for depression and anxiety and connect them with support.

EXECUTIVE SUMMARY

Acne is a highly prevalent dermatological condition, affecting approximately 20% of Canadians, with visible signs including blackheads, whiteheads, pustules (pus-filled bumps) and deep cysts, that often result in scarring and dark marks. Acne is classified into mild, moderate and severe forms, and each is associated with a negative impact on a patient's emotional well-being due to the very noticeable manifestations of this condition. Individuals with acne often have a higher risk of anxiety and depression, and report that their condition impedes their ability to socialize and conduct daily activities with confidence. Treatments range from drugstore face washes and creams, to over-the-counter products, to prescription topical and oral medications and skin procedures.

In 2022, the Canadian Skin Patient Alliance and the Acne and Rosacea Society of Canada developed a survey for Canadians with acne. The Canadian Skin Patient Alliance is a national not-for-profit patient organization formed to help Canadians affected by skin, hair and nail conditions through collaboration, advocacy and education. The Acne and Rosacea Society of Canada is a national, not-for-profit organization led by Canadian dermatologists, that aims to improve the lives of Canadians suffering with these two common skin conditions by raising awareness and providing independent, reputable information. The objective of their collaborative survey was to understand patient experiences with acne including onset, healthcare resource use, experiences with treatments, and impact on quality of life.

In June 2022, the survey was disseminated by the two organizations to Canadians with acne via various social media channels, as well as through networks of healthcare providers.

SURVEY HIGHLIGHTS

The survey was conducted in June 2022, and 154 survey responses were received from 149 individuals with acne and five caregivers who were responding on behalf of the person to whom they provide care. Of the 154 survey respondents:

- All provinces were represented, with 30% from Ontario and 20% from BC
- 🛉 68% were female
- 🛉 62% were Caucasian and 15% were Aboriginal
- Average age was 28 years (range: 16-49 years)
- 55% were adults between the ages of 20 and 29

Most respondents first experienced pimples and breakouts as adolescents or teenagers, with the average age of onset being 17 years old. However, the range was 8 to 42 years, demonstrating that acne can be experienced both in childhood and well into adulthood. Ninety percent of respondents reported that they had seen a healthcare provider for their pimples and breakouts and of these, 45% saw their family physician first while 22% had their initial healthcare visit with a dermatologist (likely after a referral from a family physician).

When asked how many healthcare visits the respondents had for their pimples or breakouts before being diagnosed with acne (or prescribed treatment), the most common response was 2 - 5 appointments (42%) and nearly 30% visited a healthcare provider more than five times. Our findings indicate that diagnosis is not always straightforward, and that patients are not typically prescribed treatment in their first visit with a

healthcare provider. Many respondents reported seeing multiple different types of healthcare providers for their acne (two on average, with a range of one to five), most commonly family physicians, dermatologists and walk-in clinic providers. Of all respondents, 58% reported that they were satisfied or strongly satisfied with the care they have received from the health care system for the management of their acne although nearly one-quarter expressed dissatisfaction/strong dissatisfaction, indicating room for improvement.

When asked about the severity of their acne, 37% of respondents reported a mild condition (blackheads, whiteheads and a few red pustules and papules intermittently). Nearly half of all respondents (47%) reported having moderate acne (blackheads, whiteheads and red pustules and papules on face), while 16% indicated severe acne (facial redness with numerous red papules and pustules, and swollen lumps and bumps on face, chest and/or back). The vast majority of respondents reported that they have scarring and pigmentation changes due to their acne (87% and 90%, respectively), representing very significant, lasting and detrimental manifestations of this condition.

Acne has left my face unrecognizable. My mental state is very depressed, prone to psychological disorders. This seriously affects my quality of life.

Respondents have tried multiple prescription and non-prescription treatments as well as skin procedures to try to gain control of their acne and were asked about their experiences. Non-prescription skin care products containing salicylic acid or benzoyl peroxide were the most used treatment: 95% of respondents reported that they had tried this option, likely due to it being the most easily attainable and perhaps least costly as well. Of those, 52% reported a little improvement and 6% reported significant improvement.

More than half (59%) of respondents reported that they had used isotretinoin pills to treat their acne, and it was the most effective treatment option seen in the survey, with 28% of individuals reporting significant improvement and 43% improving slightly.

Hormone pills were the second most effective treatment option for those surveyed. Of the 59% who reported having used them, 23% had significant improvement and 36% had minor improvement. It appears that prescription treatments may not be prescribed readily to those with acne, though future research is needed to understand whether this is due to physician perception that the patient may not be a good candidate for benefits, patient hesitation, or lack of insurance coverage for the patient.

The majority of respondents (95%) reported that they experienced acne treatment-related adverse effects in the last year, the most common being skin irritation (64%), dry skin (62%) and skin flaking (55%). When asked about current topical acne products (non-prescription and prescription), 85% of respondents reported that they were experiencing side effects due to their current regimen. Minor side effects were reported by nearly 70% of respondents, and most were willing to accept them because the treatment was effective. Sixteen percent of individuals reported severe or very severe side effects, but their willingness to tolerate them was based on treatment effectiveness. Patients are clearly balancing

out their desire to clear their skin - or at least improve it - with the harshness and discomfort of side effects, when deciding whether to start or continue their medications.

Respondents were asked to rank the importance of various factors in deciding if their acne treatment had achieved their goals. The three most prioritized goals were the ability to enjoy personal relationships, having less scarring, and having fewer changes in skin pigment. More respondents reported satisfaction with prescription treatments (58%) than non-prescription treatments (44%). It is evident that treatment gaps exist for individuals with acne, and facilitation of access to effective and safe treatments is needed.

Survey respondents reported their monthly out-of-pocket costs due to prescription and non-prescription treatments for acne. Nearly one-quarter indicated that they spend more than \$50 every month on non-prescription acne products. For prescription products including isotretinoin and hormone pills, 15% and 20% of respondents (respectively) reported that they spent over \$50 monthly, demonstrating a considerable financial burden that is not being covered by insurance. Facials and peels were used by 53% of respondents; 12% of respondents reported paying more than \$500 for each session. Sixty-five percent of respondents used light or laser therapy, and 15% spent more than \$500 each time. These costs add to the financial burden of acne.

Through completion of the acne patient questionnaire CompAQ short-form, respondents reported acne's detrimental impact on their quality of life. Half of the respondents reported that they are often or always concerned that their skin will never clear up, while 44% often or always feel self-conscious due to their acne and one-quarter avoid social interactions regularly. Respondents reported various strategies to hide acne, most commonly using make-up to cover affected areas (63%) and avoiding social gatherings (59%). Individuals with acne are clearly negatively impacted by their skin, and the consequences are far-reaching, involving a reduced sense of well-being and a reluctance to engage socially.

Respondents reported spending significant time every month on activities related to treating their acne, specifically on applying creams and treatments, and researching information. The vast majority of respondents (97%) reported struggling to control their acne, with the most prevalent challenges being hiding acne, trying to identify triggers, and out-of-pocket expenses.

My biggest struggle is trying product after product after product and getting discouraged because nothing is working and not knowing why I have acne (i.e. diet vs. hormones vs. something else entirely).

The findings described in this report illuminate important patient needs and opportunities for improvement in the treatment and management of acne in Canada and can be used to inform future research and policy initiatives. Based on these findings, CSPA and the Acne and Rosacea Society of Canada have outlined 3 recommendations to improve the lives of those with acne.

RECOMMENDATIONS

From our survey findings, we have developed several stakeholder recommendations to improve the lives of individuals with acne. For each recommendation, we have designated which government bodies, organizations and groups would be involved with its implementation.

1. Increase access to new treatment options for acne that are safe and effective.

The psychological impacts of acne are significant with widespread consequences to all aspects of daily life including the ability to work, socialize and conduct routine activities without feeling the need to mask the pimples and breakouts, or avoiding social contact altogether. The need for new, effective, and affordable treatments with fewer side effects is critical to allow those with acne to gain back their sense of well-being.



2. Ensure that healthcare providers who are likely to see patients with acne are aware of all new and existing treatment options available.

Family physicians are typically the first clinicians seen by people experiencing pimples and breakouts, and it is important that they are up-to-date on the new treatment pathways for acne. This will ensure that treatment can begin more immediately, to limit the condition's detrimental impact on the individual's quality of life. All education of healthcare providers should stress the damaging psychosocial impact of acne, the importance of early intervention and treatment to prevent scarring and changes in skin pigmentation which patients listed as two of the prioritized goals of treatment, and the need for sensitivity in interactions with patients with acne.



3. Evaluate every patient with acne for depression and anxiety and connect them with support.

Individuals with acne often have a higher risk of anxiety and depression, and report that their condition impedes their ability to comfortably socialize and conduct daily activities with confidence. To ensure that those who need it receive support services as quickly as possible, every patient diagnosed with acne should be evaluated for depression and anxiety, and offered support, care and referral to a specialist, when appropriate.



ORG: Patient groups, including the CSPA and Acne and Rosacea

BACKGROUND

Acne vulgaris (commonly known as acne) is a highly prevalent dermatological condition, caused by dead skin cells and the accumulation of sebum — an oil produced in the skin — blocking pore openings. The signs of acne include blackheads, whiteheads, pustules and deep cysts on the face, as well as other areas that are rich in oil glands, such as the chest, back and shoulders. For many of those with acne, the pimples and breakouts lead to more permanent complications including scarring and dark pigmentation changes. As the eighth most common disease globally, acne typically affects adolescents and teenagers, although it can be persistent and extend into adulthood. Onset can also occur in adulthood, and in the case of females, recent research has found that this may be a result of an excess of the androgen hormone causing high levels of sebum. In Canada, approximately 20% of the population has a mild, moderate or severe form of acne, each of which is associated with a negative impact on a patient's emotional well-being.

Due to the very visible manifestations of acne, there are considerable psychosocial impacts. Individuals with acne often have a higher risk of anxiety and depression, suicidal ideation and suicide attempts. Body dissatisfaction and distress has been found to be related to the location of the acne: back and chest acne are associated with self-consciousness, particularly during intimate interactions. Acne on the face is associated with a greater social impact, resulting in self-consciousness of appearance.

Researchers have studied risk factors for acne, finding that diet (specifically, eating foods with a high glycemic index like soda pop, white bread, and chips) and genetics may be associated with an increased risk of acne. 14-17

When first experiencing pimples and breakouts, many try to manage their skin by using non-prescription skin products such as face washes and creams. For those unable to control their acne in this way, prescription options such as hormone pills, gels and creams, and cortisone injections are available, as are skin procedures including facial peels and laser therapy. Illuminating existing treatment barriers, including side effects, costs, and inability to access medical care, is critical in supporting individuals with acne.

Given the significant psychosocial burden of acne and the ever-changing treatment landscape, it is important to understand the health journey of individuals with acne and identify unmet needs. To that end, the Canadian Skin Patient Alliance (CSPA) and the Acne and Rosacea Society of Canada collaborated on an online survey. The aim of this report is to present the survey results and contribute to the knowledge of the lived experiences of people in Canada with acne. Survey respondents were asked to share their experiences spanning from diagnosis to ongoing disease management, including severity, impact on quality of life and overall wellbeing, treatment effectiveness, and satisfaction with the health care system.

The findings outlined in this report uncover important patient needs and opportunities for improvement in the treatment and management of acne in Canada and can be used to inform research and policy directions.

METHODS

The survey is a collaboration between CSPA and the Acne and Rosacea Society of Canada, with an aim to identify the patient experience for individuals with acne, including diagnostic journey, experiences with prescription and non-prescription treatments, and impact on life. We included a 5-question scale called CompAQ-short-form (SF) to understand how facial and torso acne affected quality of life. ²⁰

The survey was created in <u>Survey Monkey</u> and designed to be completed within 10 minutes. Upon completion of the survey, respondents became eligible for a draw for an Amazon gift card and subscriptions to an online mindfulness program.

Survey eligibility criteria

- Either diagnosed with acne by a healthcare provider <u>or</u> self-diagnosed with acne <u>or</u> acting as a caregiver to an individual with acne
- Resides in Canada

Survey dissemination

We disseminated the survey link through a number of methods:

- CSPA's website, newsletter, social media channels, and email lists
- Acne & Rosacea Society of Canada's social media channels
- Network of dermatologists

The survey was open from June 7–30, 2022. We present the results below, including a selection of quotations from survey respondents.

RESULTS

In total, survey responses were received from 154 eligible respondents:

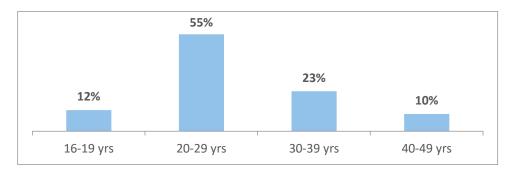
- 90 individuals (59%) whose acne was diagnosed by their dermatologist
- 37 individuals (24%) whose acne was diagnosed by a healthcare provider who was not a dermatologist
- 22 individuals (14%) who were self-diagnosed only, and
- Five caregivers (3%)

Results are presented below.

i. <u>Demographics</u>

Of the 154 eligible respondents, 68% self-identified as female, 30% as male, and 2% as non-binary. The average age of respondents was 28 years, with the total age range from 16 to 49 years, and the majority between 20 and 29 years.

Respondents in each age group (n = 132)



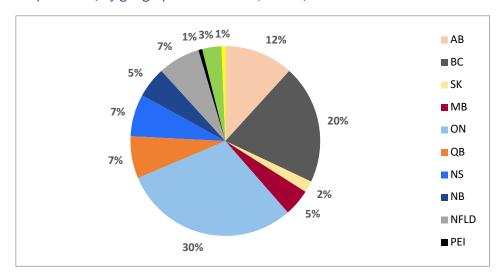
Of all respondents, 62% identified as Caucasian/White and 15% as Indigenous/Aboriginal.

Respondents of each cultural, ethnic or racial background (n = 153)

Caucasian/White	62%
Indigenous/Aboriginal	15%
Black/African American	7%
South Asian	6%
East Asian	4%
South East Asian	3%
Filipino	2%
Latin/Hispanic/Latin American	2%
West Asian	1%
Arab/Middle Eastern	1%
Russian	1%
Preferred not to answer	1%

Respondents represented all provinces and two territories, with 50% of individuals residing in Ontario and British Columbia.

Respondents, by geographical location (n = 153)



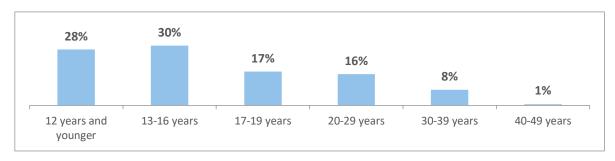
SECTION I: Acne Onset and Diagnosis

This section describes the initial experiences of respondents when they began having pimples and breakouts and includes first interactions with the healthcare system.

i. <u>History of acne</u>

The average age of respondents when they first experienced pimples and breakouts was 17 years (ranging from 8 to 42 years).

Age first started experiencing pimples and breakouts (n = 152)



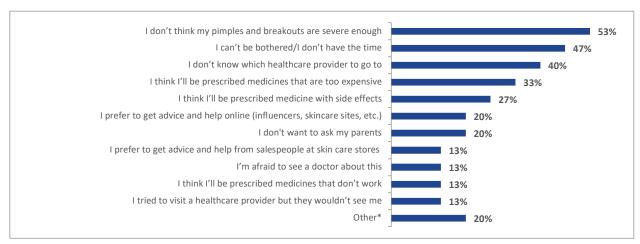
"Adult acne is frustrating because even though I don't actively have much acne, I do live with scarring on aging skin and I don't want to pay for treatments that may not work or are not long-term. I still worry with every pimple that I'll have a breakout."

ii. <u>Healthcare visits for acne</u>

Of all respondents, 90% reported that they had seen a healthcare provider for their acne.

For the 10% who had not, the three most common reasons for not seeking medical care were not feeling that their acne was severe enough, not having the time, and feeling uncertain as to which healthcare provider to see.

Reasons for not visiting a healthcare provider for acne (n = 15)

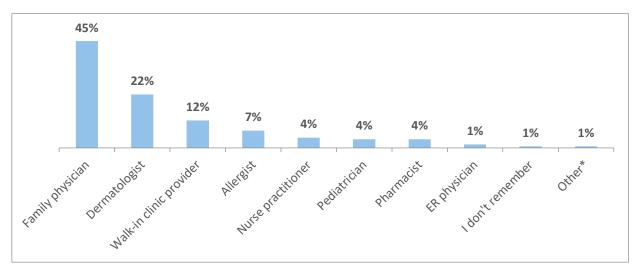


^{*}Feelings of embarrassment; doesn't have a doctor nearby

"I had recurring acne on my face and neck from puberty to about 30. It wasn't "as bad as" really bad acne, so I never sought treatment, but I was embarrassed by it, especially when I picked it and I had bleeding. No doctor ever said "I see that and can maybe help you with it." I went to the ER for a concussion and had acne all over my back, that I'd scratched. That was the first time a healthcare professional said anything."

For those that indicated that they visited a healthcare provider for their pimples and breakouts, the most common provider first seen was a family physician (45%), while 22% first visited a dermatologist (likely with a referral from a family physician).

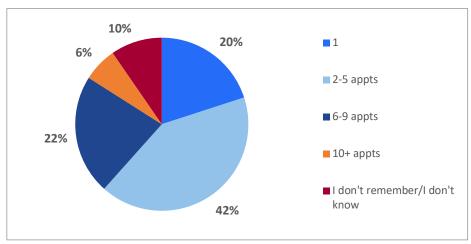
First healthcare provider visited for acne (n = 139)



^{*}Sexual health clinic physician

When asked how many healthcare visits the respondents had for their pimples or breakouts before being diagnosed with acne (or prescribed treatment), the most common response was 2-5 appointments (42%). Nearly 30% of respondents visited a healthcare provider more than five times.

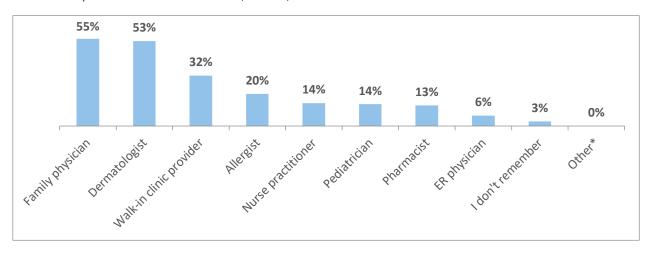
Total number of healthcare provider visits prior to diagnosis (n = 125)*



^{*}Includes respondents who were not officially diagnosed with acne but were prescribed treatment

Respondents have seen multiple types of healthcare providers for their acne, most commonly family physician, dermatologist and walk-in clinic provider. The average number of <u>different</u> healthcare provider types visited for acne was two, with a range of one to five. More than half of respondents reported that they had visited a family physician and a dermatologist.





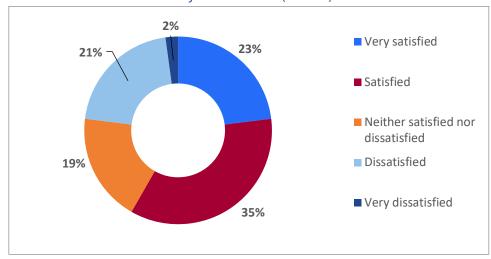
^{*}Esthetician, gynecologist, naturopath

"When I brought up tretinoin to the first doctor I saw for my acne, she said it was too strong and complex. To be fair, I was 16. I've been on tretinoin for almost 2 1/2 years. I feel upset, thinking back, as I could've been 4 years into tretinoin treatment. My skin would've been so much nicer if she hadn't denied me it."

iii. Satisfaction with medical care for treating acne

Nearly one-quarter of respondents (23%) indicated that they were dissatisfied or strongly dissatisfied with the care they have received from the healthcare system for the management of their acne.





"Doctors ask you if your acne bothers you as a benchmark for whether you want treatment which makes me feel unsure. On the one hand of course it bothers me because I'm seeking help but at the same time it feels like you're justifying your care."

iv. Discussion

The average age of acne onset for survey respondents was 17 years old, implying that our sample was a mix of individuals with adolescent-onset acne and adult-onset acne. The vast majority of this survey's participants sought medical care for their acne, which is much higher than previous studies that reported less than 50% of those with acne visited a healthcare provider. This difference can likely be attributed to our survey respondents being older than samples from other surveys, leading to reduced barriers to access (such as obtaining parental permission). Additionally, our recruitment methods included having clinicians (mainly dermatologists) reach out to patients, and also promotion to individuals already engaging with the CSPA or subscribed to the Acne and Rosacea Society of Canada's social media channels, meaning that our strategies specifically engaged those who likely sought care for acne.

"My acne issue wasn't taken very seriously by healthcare providers over the past 30+ years that I've struggled with it; acne was just considered a part of growing up. And maybe my acne just wasn't as bad as other people's acne. But it always affected me mentally; I hated my skin (and still do) and have always felt unattractive because of it. Eventually I was embarrassed to bring it up again with my physician(s)."

SECTION II: Acne Signs

i. <u>Severity of acne</u>

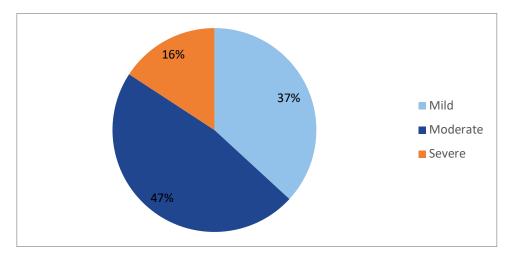
Respondents were provided with definitions and pictures of mild, moderate and severe and were asked to indicate the severity of their acne.

Mild: Blackheads, whiteheads and a few red pustules and papules ("pimples") on the face from time to time

Moderate: Blackheads, whiteheads and red pustules and papules (pimples and red bumps) on the face. May or may not include pimples and bumps on the chest and/or back as well. Severe: A lot of redness on the face with numerous, red papules and pustules ("pimples") and sometimes swollen and painful lumps and bumps on face, chest and/or back

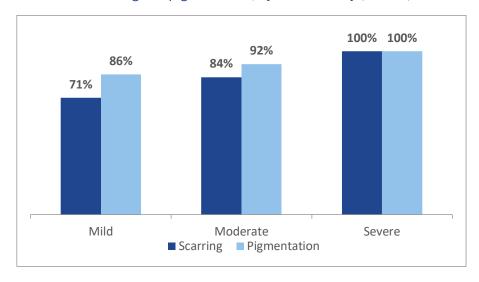
Nearly half of all respondents (47%) reported that they had moderate acne, while 16% indicated that their skin condition was consistent with severe acne.

Severity of acne (n = 133)



The vast majority of respondents reported that they had both scarring (87%) and pigmentation (90%) due to their acne. The proportion of respondents who indicated that they had these complications increased with acne severity, and 100% of those who indicated that their skin condition met the definition of severe acne reported both scarring and dark pigmentation.

Presence of scarring and pigmentation, by acne severity (n = 109)



ii. <u>Discussion</u>

Most survey respondents reported both scarring and pigmentation changes, and of note, these complications were very prevalent even in those with mild acne. This supports previous research which provides evidence that the long-lasting burden of this condition can impact everyone afflicted, regardless of acne severity.^{21,22}

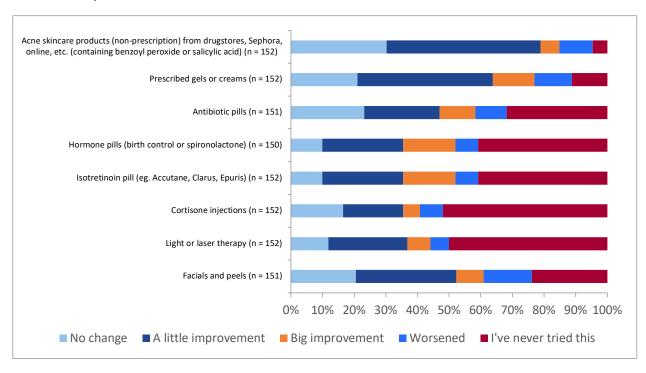
SECTION III: Use of Treatments for Acne

i. <u>Experiences with prescription and non-prescription treatments</u>

Respondents rated the level of acne improvement (if any) they experienced when using a variety of treatments.

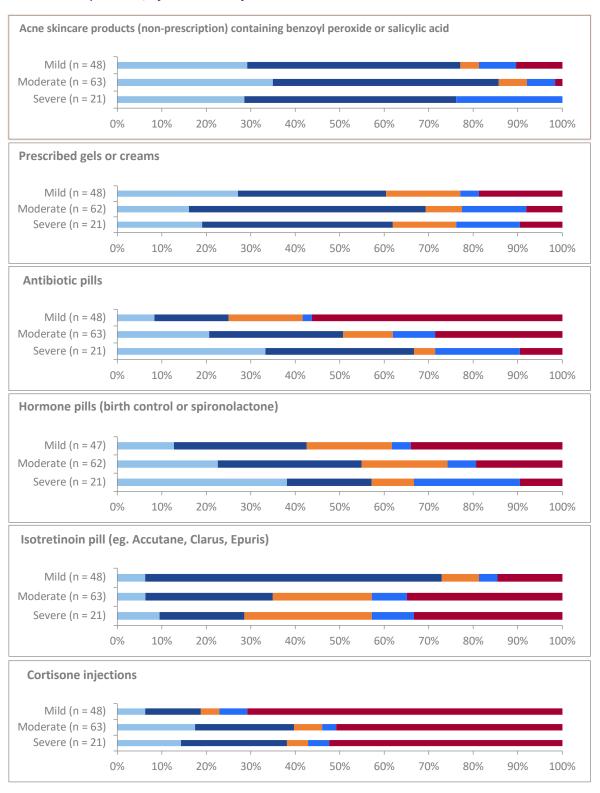
- Non-prescription skin care products containing salicylic acid or benzoyl peroxide were much more commonly used than any other treatment, with 95% of respondents reporting that they had tried this option for their acne
 - o Of those, 52% reported a little improvement and 6% reported significant improvement.
- More than half (59%) of respondents reported that they had used isotretinoin pills to treat their acne. For those who had tried this treatment, 28% reported significant improvement in acne, making this option the most effective option for those surveyed.
- Hormone pills were the second most effective treatment option for those surveyed. Of those who reported having used them, 23% had significant improvement and 36% had minor improvement.

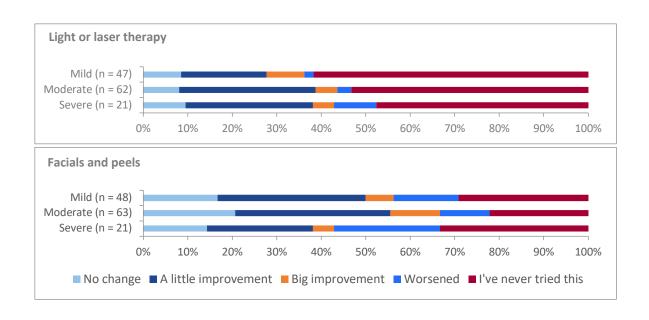
Treatment experience



Treatment experiences were compared based on the respondents' acne severity. Those with severe acne were more likely to have tried many of the treatment options than those with a milder form of the condition. Of all options, those with moderate or severe acne had the best effect from isotretinoin pills (22% and 29% reported a large improvement, respectively) while for respondents with mild acne, hormone pills were the most effective treatment, with 19% noting a significant improvement.

Treatment experience, by acne severity

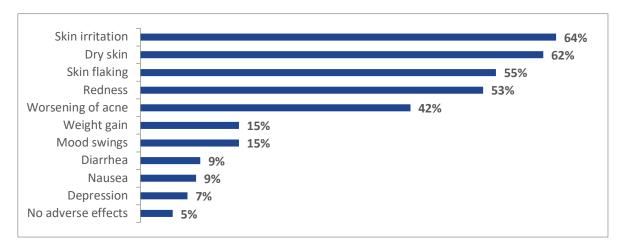




ii. Side effects of treatments

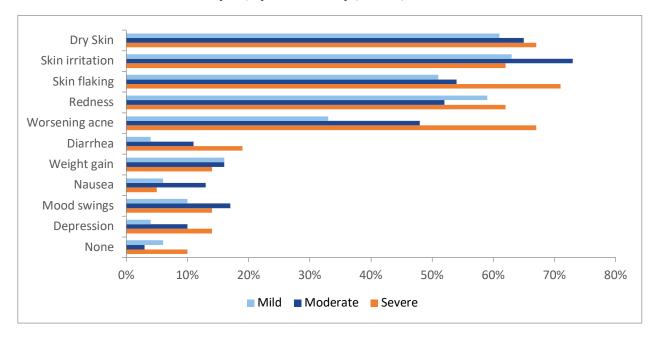
Only 5% of respondents reported not having experienced any acne treatment-related adverse effects in the last year. For those that did, the most common effects were skin irritation (64%), dry skin (62%) and skin flaking (55%).

Treatment side effects in the last year (n = 151)



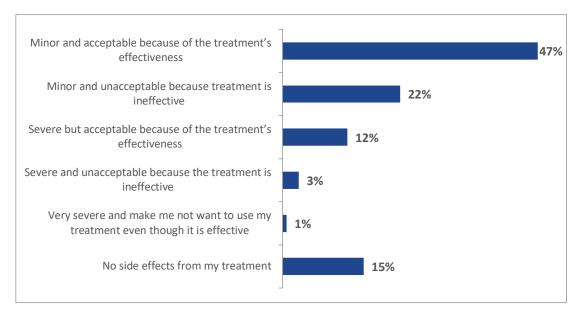
The vast majority of all respondents, regardless of acne severity, experienced treatment-related adverse effects in the last year, with at least one effect reported by 94% of those with mild acne, 97% of those with moderate acne and 90% of those with severe acne. Individuals with severe acne reported more dry skin, skin flaking, redness and worsening of acne due to treatments than those with milder forms of this condition.

Treatment side effects in the last year, by acne severity (n = 133)



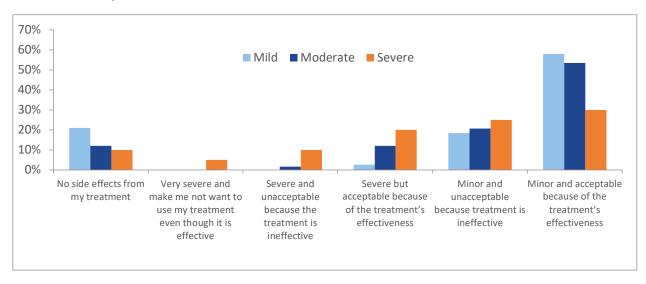
We asked about experiences with current topical acne products (non-prescription and prescription), and 85% of respondents reported that they were having side effects. Minor side effects were reported by nearly 70% of respondents, and most individuals were willing to accept them because the treatment was effective. Sixteen percent of individuals reported severe or very severe side effects, but their willingness to tolerate them was based on treatment effectiveness.

Respondents' impressions of the side effects they are experiencing with current acne treatments (n = 133)



Those with severe acne were more likely to experience side effects, potentially because they were using stronger or harsher treatments that can cause irritation to the skin.

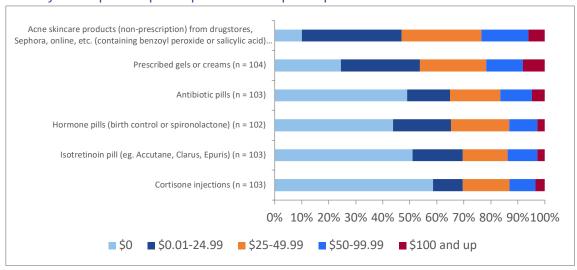
Respondents' impressions of the side effects they are experiencing with current acne treatments, based on severity (n = 133)



iii. Cost of treatments and procedures

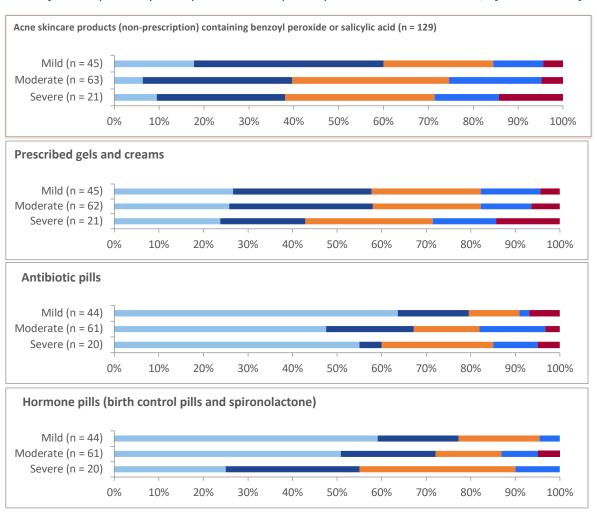
Survey respondents reported their monthly out-of-pocket costs due to prescription and non-prescription treatments for acne. Nearly one-quarter of individuals indicated that they spend more than \$50 every month on non-prescription acne products. Between 15 and 20% of respondents reported that they spend that amount on each of the various prescription pills, gels and injection treatment options, providing evidence of a considerable financial burden that is not being covered by insurance.

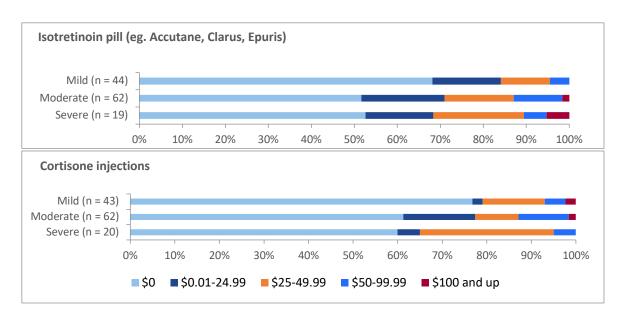




When costs spent on acne products were compared based on respondents' acne severity, we found that a higher percentage of individuals with severe acne paid \$100/month or more on non-prescription acne products (14%) than those with mild (4%) or moderate acne (5%). Respondents are also spending a considerable amount on prescribed gels and creams: 28% of those with severe acne and 17% of those with mild or moderate acne paid \$50 or more every month.

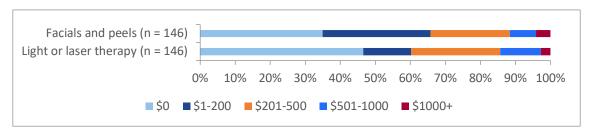
Monthly costs spent on prescription and non-prescription treatments for acne, by acne severity





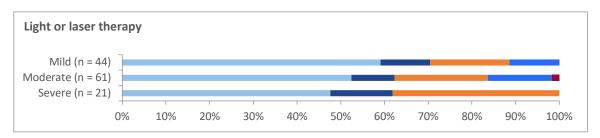
Respondents were also asked about specific skin procedures, and the costs associated with each one. Facials and peels were used by more than half of all respondents (53%) while 65% underwent light or laser therapy. Of all respondents, 12% reported paying more than \$500 for each facial and peel, while 15% spent more than \$500 for each light or laser therapy session.

Per-session costs spent on procedures for acne



Individuals with moderate or severe acne were slightly more likely to undergo procedures to treat acne than those with mild acne, and out-of-pocket costs are significant. More than 30% of respondents of each severity spend more than \$200 monthly on light or laser therapy while more than 28% of respondents of each severity spend that amount on facials and peels.

Per-session costs spent on procedures for acne, by acne severity





iv. <u>Treatment goals</u>

Respondents were asked to rank the importance of eight life-related goals for factors in deciding if their acne treatment had achieved their goals. The goals are listed below in order of priority to respondents, from most important to least:

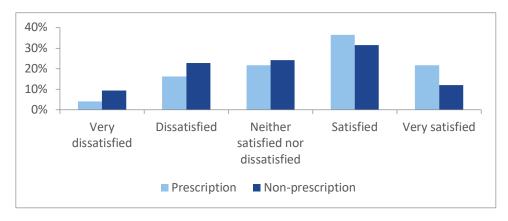
- Ability to enjoy personal relationships
- Having less scarring
- Fewer changes in skin pigment
- Clearer skin
- Better mental health
- Increased confidence
- Ability to be social
- Improved overall daily life

Goals of treatment did not considerably differ based on the respondents' acne severity.

v. Satisfaction with treatments

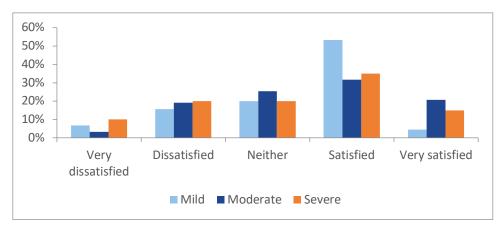
Respondents indicated more satisfaction with prescription treatments than non-prescription treatments, with 58% and 44% reporting being satisfied/very satisfied, respectively.

Satisfaction with treatments (n = 149)



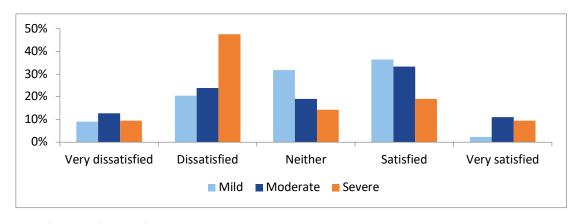
Those with severe acne were slightly more likely to feel dissatisfied/very dissatisfied with prescription treatments (30%) than those with mild acne (23%) or moderate acne (22%).





Similar findings were seen for non-prescription treatments: only 29% of those with severe acne reported feeling satisfied or very satisfied by these products, while 38% of those with mild acne and 44% of those with moderate acne indicated that they were satisfied or very satisfied.

Satisfaction with non-prescription treatments, by acne severity (n = 128)



vi. Discussion

Respondents have clearly tried many non-prescription and prescription acne products, as well as skin procedures, and incurred significant out-of-pocket costs, to clear their skin. The most common products used for pimples and breakouts were face washes and creams containing benzoyl peroxide or salicylic acid. This has been observed in other studies as well, ¹⁸ and is likely due to these products not requiring a prescription and therefore being easiest – and perhaps, seemingly most "safe"- to access. Prescription treatments such as isotretinoin and hormone pills were less commonly tried, though were reported as the most effective.

Minor and severe treatment-related adverse effects were extremely common, experienced by 95% of respondents in the past year. Most of these side effects were skin-based, and many respondents reported that they tolerated these unwanted effects in order to reap the benefits of the treatment,

providing evidence of the struggle that individuals with acne experience when trying to clear their skin. Those with more severe acne were more likely to have treatment side effects such as dry skin, redness and worsening of their condition, than those with mild or moderate acne, likely attributed to the use of more potent products.

The most common treatment-related goals centred around enjoying personal relationships, and avoiding acne complications of scarring and pigmentation changes. Only about half of respondents reported satisfaction with current treatment ability to meet these goals, representing a significant unmet need for patients who need relief from this condition and the large psychosocial burden it carries.

"I feel hopeless. I feel like I have tried everything at the drugstore and spent way too much on these products..."

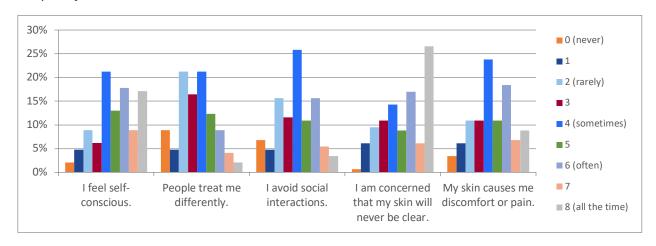
SECTION IV: Impact of Acne on Daily Life

i. <u>Frequency of acne-related concerns</u>

Respondents reported acne's detrimental impact on their quality of life through completion of the CompAQ-SF questions. Half of the respondents are often or always concerned that their skin will never clear up, while 44% often or always feel self-conscious due to their acne. One-quarter of individuals indicated that they avoid social interactions regularly.

"It affects my mood mainly because it makes me unable to socialize normally."

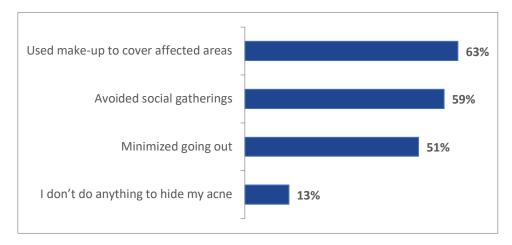
Frequency of various acne-related concerns



ii. <u>Strategies to hide acne</u>

Most respondents (87%) reported that they use strategies to hide acne, most commonly wearing make-up to cover affected areas (63%) and avoiding social gatherings altogether (59%).

Strategies used to hide acne (n = 147)

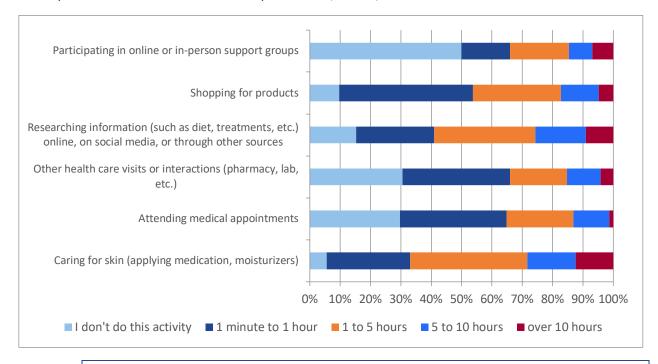


"I guess I've just learned to live with my acne as best as I can, to try not to pick at it, and to cover it up with makeup. I actually enjoyed wearing a mask during the pandemic...it hid my acne so well!"

iii. <u>Time spent on activities related to acne management</u>

When asked about time spent in a typical month on activities related to their acne, respondents reported that they dedicate the most time towards caring for their skin and researching information about acne and acne treatments. Nearly all respondents indicated that they spent time applying moisturizers and treatments, and 12% reported spending 10 hours or more each month caring for their skin through moisturizers and treatments.

Time spent on activities related to acne per month (n = 144)

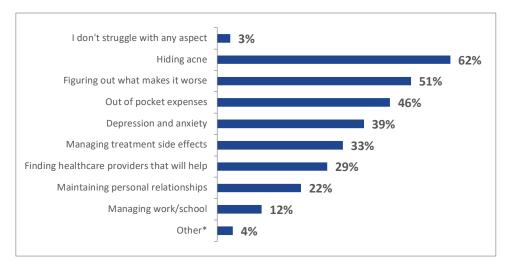


"After acne, people around me looked at me differently and gradually moved away from me, which made me feel isolated."

iv. Challenges in managing acne

Respondents reported multiple ways in which they struggled with managing their acne, with only 3% of individuals indicating no struggle at all. Hiding acne, and trying to identify triggers, as well as mounting out-of-pocket expenses for treatments were the three most common areas of struggle.

Struggles experienced by respondents due to providing care for individual with acne (n = 139)



^{*}Trying to calm down flare ups

"People sometimes refused to socialize with me when I had extensive acne, and I had low self-esteem and low confidence."

v. <u>Discussion</u>

Acne has been previously found to have a detrimental impact on quality of life.²³ This was also demonstrated by our survey's respondents, whose significant distress over their acne manifested in numerous ways including worry that their condition will be permanent and feeling self-conscious about their skin. These concerns led to respondents spending time and efforts to research ways to control their acne and use products to care for their skin. It is clear that for those with acne, much of their daily lives are consumed by their skin, whether they are caring for it, attempting to hide it, or trying to identify what exacerbates their pimples and breakouts.

SURVEY TEAM

- The survey team consisted of the following:
- Rachael Manion (Canadian Skin Patient Alliance)
- Sabrina Ribau (Canadian Skin Patient Alliance)
- Sue Sherlock (Acne and Rosacea Society of Canada)
- Dr. Jerry Tan (University of Western Ontario)
- Brittany Kuzemka (Patient representative)
- Meena Haji (Patient representative)
- Dr. Jennifer Pereira (JRL Research & Consulting Inc.)

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Acne and RosaceaSociety of Canada



Canadian Skin Patient Alliance

Alliance canadienne des patients en dermatologie