

## **“More Than a Skin Disease”**

Opportunities to Broaden the Community  
by Reclassifying Atopic Eczema



International Alliance of  
Dermatology Patient  
Organizations

[GLOBALSKIN.ORG](http://GLOBALSKIN.ORG)

## BACKGROUND AND CONTEXT

GlobalSkin has played a leading role in supporting the development of the atopic eczema community since 2018. In 2019, GlobalSkin leveraged its convening power to bring together diverse patient leaders in the space from around the world to frame the community's ambitions and develop a strategic roadmap for enabling people living with atopic eczema to live fulfilling and healthy lives. This strategic roadmap identified two key pillars: building community capacity and galvanizing global action. In consultation with patient leaders on atopic eczema, GlobalSkin derived that **in order to advance the mission of atopic eczema awareness, broaden the atopic eczema community, and galvanize the greatest opportunity for change, atopic eczema must be reclassified as "more than a skin disease."** Building the global community around this theme would ensure that any future policy action be more effective. Growing partnerships with more diverse stakeholders and leveraging new data is essential to establishing a foundation of understanding of the disease and driving future change at a policy level. Focusing on collaboration in early stages will strengthen global communications for change around atopic eczema and its impacts on health and society.

## INTRODUCTION

Atopic eczema, also known as atopic dermatitis or eczema, is on the rise.<sup>1,2</sup> Atopic eczema is the most common inflammatory skin disorder in the developed world, with a lifetime prevalence of 15-20% in developed countries.<sup>3</sup> According to the World Health Organization (WHO) Global Burden of Diseases initiative, more than "230 million people globally" have atopic eczema. **This represents approximately 3 percent of the global population (compared to 1.3 percent with cancer), creating a significant impact on health systems, economies, and societies.**<sup>4</sup> Common symptoms of atopic eczema include dry, extremely itchy, and occasionally painful skin<sup>5</sup> that is easily irritated and prone to infections such as *Staphylococcus aureus*<sup>6</sup> or herpes simplex virus.<sup>7</sup>

**Atopic eczema is more than skin deep: it is a systemic, multidimensional disease that affects the minds and bodies of people around the world.** Atopic eczema-related stigma heavily influences a patient's quality of life over and above more general psychological factors, such as depression.<sup>8</sup> These findings have important implications for the psychological and clinical management of atopic eczema. Additionally, children with more severe atopic eczema have lower quality of family life due to factors such as social isolation, frustration from lack of improvement in the disease's progression, and sleep loss.<sup>9</sup> The implications of these comorbidities stretch far into their adult life. Additionally, there is increasing evidence that the condition could be seen as a type-2 inflammatory disease,<sup>10</sup> and puts patients at an increased risk for several other autoimmune diseases, infections, and other comorbidities.<sup>11</sup>

Atopic eczema is far **more impactful to the lives of patients, has greater connections to society, and stronger implications on global health** than is acknowledged by the broader health and policy communities.

**We need global momentum for change.** By broadening the scope of stakeholders and awareness, GlobalSkin can develop a stronger atopic eczema community. This document builds on a detailed landscape analysis and captures three significant opportunities for engagement that will help build and strengthen the atopic eczema community in view of improving its position and visibility globally.

- 1. Making Connections with Atopic Eczema Comorbidities.**
- 2. Reclassifying Atopic Eczema as a Systemic Disease.**
- 3. Developing Stronger Relationships with New Regions/Communities.**

## **BUILDING COMMUNITY BY CONNECTING WITH ATOPIC ECZEMA COMORBIDITIES**

Atopic eczema affects different people differently. While the disease is most prominently displayed on the skin, most advocates and health care professionals do not take into account the various other effects that atopic eczema has on its population, mentally and physically.

Atopic eczema has a significant impact on mental health—one study shows that atopic eczema is more detrimental to patients' mental health than diabetes or hypertension.<sup>12</sup> Overall, atopic eczema patients suffer more intensely in terms of decreased emotional stability, social functioning, mental health, and vitality when compared – for example – to psoriasis patients.<sup>13</sup> Most of these mental health issues are attributed to an endless cycle of itch and stigma. Stress has negative effects on the immune system, impairs healthy skin barrier function, and creates more inflammation, potentially aggravating symptoms such as itching.<sup>14</sup>

Mental health is not the only consequence of the condition: physical comorbidities are common in both adults and children. For example, children and adults with atopic eczema are more prone to ear infections, sinus infections, gastroenteritis, and even chickenpox.<sup>15 16 17</sup> Eczema and obesity together have been associated with higher cardiovascular risk.<sup>18</sup> This can be viewed in two ways: either, obesity ignites a long-term inflammatory status, and this status induces immune dysfunction and hypersensitivity that lead to atopic eczema; or alternatively, a sedentary lifestyle induces both atopic eczema and obesity.<sup>19</sup>

The cumulative impact of the comorbidities on people with atopic eczema is significant for two reasons. Firstly, they broaden the definition of atopic eczema as more than a disease that only impacts the skin but one that also impacts the mind and other systems of the body. **It is therefore necessary to treat atopic eczema as an interconnected disease that secondly, has deeper implications to patient and societal health than previously acknowledged.** This is a prime opportunity for atopic eczema advocates to connect with new stakeholders in mental health, infectious, and cardiovascular disease areas.

While earlier coalitions have focused on dermatological and allergy-related links, an expanding coalition for atopic eczema will bring in those with expertise and interest in the mental health, infectious disease, and cardiovascular health. This also would be an opportunity for future policy engagement as these issues, particularly mental health, are a hot topic in the global health community.

### **Taking Action on Atopic Eczema:**

- **Link Atopic Eczema with Mental Health:** Showcase mental health and other comorbidities as key components of atopic eczema, encouraging advocates, health care professionals, and patients to make it a part of the discussion.
- **Connect Diverse Stakeholders:** Develop a coalition of traditional and non-traditional stakeholders in atopic eczema to highlight the diversity of ways atopic eczema can appear.
- **Develop Broader Outreach:** Create a global awareness campaign highlighting the links among atopic eczema, mental health, and physical comorbidities.
- **Increased Training:** Educate health care professionals on these comorbidities and urge them to treat atopic eczema holistically.

## **BUILDING COMMUNITY BY RECLASSIFYING ATOPIC ECZEMA AS A SYSTEMIC, TYPE-2 INFLAMMATORY DISEASE**

Atopic eczema goes well beyond what the eye can see. Recent research has indicated atopic eczema to share similarities with type-2 inflammatory illnesses such as celiac disease, rheumatoid arthritis, and lupus as well as allergies, chronic rhinitis, and nasal polyps.<sup>20</sup> However, few scientific journals and advocacy organizations point to this connection and see it as an area worthy of study. **Framing atopic eczema as a systemic condition, effectively connecting it within a broader cluster such as type-2 inflammatory conditions will create more opportunities for community and discussion, require a coordinated care effort with multiple care specialists, and also help to advance public prioritization of a broader underserved patient community.**

Researchers have long known about the “atopic march”, which reveals that atopic eczema is not a disease in isolation. Atopic eczema often precedes other type-2 inflammatory conditions, such as food allergy, asthma, and allergic rhinitis.<sup>21</sup> One hallmark of atopic eczema is skin barrier dysfunction, leading to increased water loss in the skin and the penetration of noxious environmental stimulants that trigger this immune response pathway.<sup>22</sup>

This immune response has been confirmed by findings which show that patients with severe atopic eczema experience significant improvement when treated with therapy that limits the overreaction of the immune system, tones down the inflammatory response, and subsequently lessens the symptoms of atopic eczema.<sup>23 24</sup> These early case reports suggest that limiting this immune overreaction can improve severe atopic eczema.<sup>25</sup>

Researchers are beginning to recognize atopic eczema as an immune-mediated inflammatory condition at a time when this category of diseases is gaining more traction and attention amongst the medical community and general public alike. If considered an inflammatory condition, this would be one of the most prevalent conditions in this category, dwarfing better-known autoimmune conditions such as Type 1 Diabetes and Rheumatoid Arthritis.<sup>26 27 28</sup>

In such a scenario there could therefore be the emergence of a broader coalition that could heighten interest for future policy and advocacy measures on these diseases.

### **Taking Action on Atopic Eczema:**

- **Awareness Campaign:** Establish a global science-based education campaign identifying atopic eczema as a type-2 inflammatory disease.
- **Inflammation Coalition:** Unite medical professionals, scientific researchers, and advocates for skin and inflammation around the need to categorize atopic eczema as a type-2 inflammatory disease.
- **More Funding:** Incite a global campaign for funding for further research on type-2 inflammatory disease and atopic eczema.

## **BUILDING COMMUNITY BY REACHING OUT TO NEW GLOBAL AUDIENCES**

Atopic eczema is considered a “Western disease” or a “rich man’s disease”, a pattern that used to be mistakenly attributed to non-communicable diseases in early 2000s. However, there is rising reconsideration of this interpretation as local studies in Asia, Africa, and South America have revealed that rates of atopic eczema are comparative to their Western counterparts.

Local studies show that atopic eczema is just as common in non-Western countries as they are in the U.S., Europe, and Australia. Prevalence of atopic eczema across Asia, Africa, and South America is comparable to the Western average of 20 percent of children and 3 percent of adults.<sup>29</sup> For example, in a rare worldwide survey of six-to seven-year-old children, children from Africa suffered the most from atopic eczema with a high prevalence of 23.3 percent, compared to 7.2 percent in the eastern Mediterranean.<sup>30</sup> However, while there are several local studies on atopic eczema numbers, significant global prevalence studies are few and far between.

While prevalence is similar, treatment can vary wildly, and many go to traditional medicine for support. While some areas have access to essential drugs, particularly those imported from approved skin manufacturers in Western countries to care for atopic eczema, many do not. For example, “one emollient tube represents 15 percent of local minimum monthly salary in Madagascar” and is therefore inaccessible to many people.<sup>31</sup>

The lack of treatment of atopic eczema and its comorbidities also makes people with atopic eczema in non-Western countries more vulnerable to quality-of-life issues and negative comorbidities. In the study measuring quality of life of Saudi Arabian patients with skin diseases, researchers found that “31.4 percent of patients had comorbidities, the most common being diabetes (43.8 percent) and hypertension (47.2 percent).”<sup>32</sup> About “20 percent of patients reported a comorbid psychiatric condition.”<sup>33</sup> This is as much a matter of access to care as cultural attitudes towards atopic eczema care.

The issues above exacerbated by not acknowledging non-Western atopic eczema, calls for both a greater need of study and greater need of access to care. By creating these connections, the case for atopic eczema’s prominence and awareness is strengthened and will call greater attention to the needs of its patients. This is not the first time this approach to skin care has grown to success: the WHO adoption of the Psoriasis Resolution led to both greater support for regions in need and lent all countries greater credibility because their messages were now being considered by the highest global health policymaker. **A greater investment of time and resources into these geographies’ advocates, health care professionals, and leadership should help grow understanding of atopic eczema as a significant global health issue, meeting the needs of millions of underserved patients.**

Stronger connections should be made among dermatologists, skin advocates, and health organizations within these regions by assessing and collaborating on specific issues within these areas such as disease awareness and access to treatment. In addition to creating a broader coalition of atopic eczema advocates, this will bolster future outreach and negotiations with global institutions such as the WHO and WHA.

### **Taking Action on Atopic Eczema:**

- **Make Atopic Eczema Advocacy Truly Global:** Actively connect with non-Western advocacy organizations, skin disease experts, and health care providers in Asia, Africa, and South America, learn more about the significant issues faced in their countries and regions and include these issues as key factors in global atopic eczema advocacy work.

- **Connect with Global Multilaterals:** Connect with institutions like the WHO and APEC to address issues of global health as related to atopic eczema.
- **More Funding:** Advocate to global multilateral organizations for more funding for global and comparative studies on atopic eczema, including disease prevalence.

## REFERENCES:

---

- <sup>1</sup> Hajar T and Simpson E. "The Rise in Atopic Dermatitis in Young Children: What is the Explanation?" November 2018.
- <sup>2</sup> Odhiambo JA et al. "Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three." December 2009.
- <sup>3</sup> Weidinger S et al. "Atopic Dermatitis." June 2018.
- <sup>4</sup> Roser, Max and Hannah Ritchie. "Cancer." Our World in Data. April 2018. ([link](#))
- <sup>5</sup> Thomsen S. "Atopic Dermatitis: Natural History, Diagnosis, and Treatment." April 2014.
- <sup>6</sup> Clausen ML et al. "Staphylococcus aureus colonization in atopic eczema and its association with filaggrin gene mutations." November 2017.
- <sup>7</sup> Traidl S et al. "Patients with atopic dermatitis and history of eczema herpeticum elicit herpes simplex virus—specific type 2 immune responses." March 2018.
- <sup>8</sup> Wittkowski, A et al. "The impact of psychological and clinical factors on quality of life in individuals with atopic dermatitis." August 2004.
- <sup>9</sup> Lewis-Jones S. "Quality of life and childhood atopic dermatitis: the misery of living with childhood eczema." August 2006.
- <sup>10</sup> Hamilton, J et al. "Dupilumab improves the molecular signature in skin of patients with moderate-to-severe atopic dermatitis." December 2014.
- <sup>11</sup> Narla, S & Silverberg JI. "Association between atopic dermatitis and autoimmune disorders in US adults and children: A cross-sectional study." October 2018.
- <sup>12</sup> Kiebert, G et al. "Atopic Dermatitis is associated with a decrement in health-related quality of life." March 2002.
- <sup>13</sup> Lifshitz, C. "The Impact of Atopic Dermatitis on Quality of Life." April 2015.
- <sup>14</sup> Arndt, J et al. "Stress and atopic dermatitis." July 2008.
- <sup>15</sup> Serrano L, et al. "Atopic dermatitis associated with extracutaneous infections." 2019. ([link](#))
- <sup>16</sup> Silverberg, J et al. "Childhood atopic dermatitis and warts are also associated with increased risk of infection: a US population-based study." April 2014. ([link](#))
- <sup>17</sup> Strom, M et al. "Association between atopic dermatitis and extracutaneous infections in US adults." October 2016. ([link](#)); Serrano L, et al. "Atopic dermatitis associated with extracutaneous infections." April 2019. ([link](#))
- <sup>18</sup> Nahm, DH. "Associations of Atopic Dermatitis With Obesity and Unmarried Status in Young Adults: Evidence for Atopic Dermatitis as a Life-Style Disorder With High Social Impact." Allergy, Asthma, and Immunology Research. March 2016. ([link](#))
- <sup>19</sup> Nahm, DH. "Associations of Atopic Dermatitis With Obesity and Unmarried Status in Young Adults: Evidence for Atopic Dermatitis as a Life-Style Disorder With High Social Impact." Allergy, Asthma, and Immunology Research. March 2016. ([link](#))
- <sup>20</sup> American Academy of Dermatology. "Atopic Dermatitis and Autoimmune Diseases." 2018. ([link](#))
- <sup>21</sup> Leung DY. "Clinical implications of new mechanistic insights into atopic dermatitis." *Current Opinion in Pediatrics*. August 2016. ([link](#))
- <sup>22</sup> Ariëns LFM, et al. "Dupilumab in atopic dermatitis: rationale, latest evidence and place in therapy." *Therapeutic Advances in Chronic Disease*. May 2018. ([link](#))
- <sup>23</sup> Tsianakas A, Stander S. "Dupilumab: a milestone in the treatment of atopic dermatitis." *The Lancet*. October 2015. ([link](#))
- <sup>24</sup> Dupilumab fact sheet. National Eczema Society. 2019. ([link](#))
- <sup>25</sup> Ariëns, LFM, et al. "Dupilumab in atopic dermatitis: rationale, latest evidence and place in therapy." *Therapeutic Advances in Chronic Disease*. May 2019. ([link](#))
- <sup>26</sup> Simpson, C. et al. "Trends in the epidemiology and prescribing of medication for eczema in England." March 2009. ([link](#))
- <sup>27</sup> Sardu, C. et al. "Population based study of 12 autoimmune diseases in Sardinia, Italy: prevalence and comorbidity." March 2012. ([link](#))
- <sup>28</sup> CDC. "National Diabetes Statistics Report, 2017. Estimates of Diabetes and its Burden in the United States." 2017. ([link](#)).
- <sup>29</sup> Nutten, S. "Atopic Dermatitis: global epidemiology and risk factors." April 2015 ([link](#)); Silverberg JI. EADV Congress, Abstract FC01.01. 2018. ([link](#) to release)
- <sup>30</sup> Mallol J, et al. "The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three: a global synthesis." *Allergologia et Immunopathologia*. April 2013. ([link](#)); Odhiambo JA, et al. "Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three." *Journal of Allergy and Clinical Immunology*. December 2009. ([link](#))
- <sup>31</sup> Schmid-Grendelmeier P, Takaoka R, Ahogo KC, et al. "Position Statement on Atopic Dermatitis in Sub-Saharan Africa: current status and roadmap." *Journal of the European Academy Dermatology and Venereology*. November 2019. ([link](#))
- <sup>32</sup> Abolfotouh MA, et al. "Quality of life in patients with skin diseases in central Saudi Arabia." *International Journal of General Medicine*. July 2012. ([link](#))

---

<sup>33</sup> Abolfotouh MA, et al. "Quality of life in patients with skin diseases in central Saudi Arabia." International Journal of General Medicine. July 2012. ([link](#))