

Global Psoriasis Atlas



PHASE III

Annual Report

April 2023 – March 2024



Mission

The mission of the GPA is to provide the common benchmark on the burden of psoriasis in all countries and regions throughout the world. The GPA will leverage existing data from publications and registries; where gaps are identified additional studies will be commissioned. The GPA is a long-term project that seeks both to drive continuous improvement in the understanding of psoriasis and uncover how it affects both the individual and society at large.

Vision

The vision of the Global Psoriasis Atlas is to become the leading epidemiological resource globally on psoriasis.



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Foreword



It is hard to believe that we are already into the second year of three in Phase III of the Global Psoriasis Atlas (GPA) and it is seven years since the Atlas was launched.

We have come a long way since the first twinkle in the eye of a GPA emerged out of the landmark declaration by the World Health Assembly a decade ago that psoriasis is a serious non-communicable disease. This year, as with all those preceding it, has been one replete with success for the GPA – you will read the roll call in the report but I will highlight just a couple. In July of 2023 the team decamped to Singapore for the quinquennial jamboree that is the World Congress of Dermatology, this being the 25th edition. The GPA had a large exhibit stand staffed by members of the team on a daily basis – the footfall was immense with many new signups to the Atlas and several meetings with interested parties such as from Mongolia and Indonesia. I truly believe the GPA came of age in Singapore with strong brand recognition and reference to GPA-generated data in many psoriasis lectures. The other highlight, for me, was our expedition to the Eastern Cape of South Africa – the SKINSCAPE field survey. As readers of our Newsletters will be aware, we

have performed field surveys before and learnt from them – an iterative process. SKINSCAPE was undoubtedly our most ambitious and most intense – a complete, house-to-house skin disease survey in two rural townships in the Eastern Cape in December 2023. Colleagues from South Africa, France and Israel supplemented our UK team and we achieved our goal of a full cross-sectional survey. Success was down to immense *esprit de corps* and the energy and leadership of our host Professor Ncoza Dlova. A blueprint for all future surveys.

We are no longer alone. No, I haven't had an extra-terrestrial encounter but we are now a merry band of four atlases with three newcomers – atopic dermatitis, vitiligo and hidradenitis suppurativa under the brand of Grand Challenges in Global Skin Health. I am excited about the opportunities this collaborative working will bring with economy of scale and synergy.

We said goodbye to two GPA stalwarts Rebekah Swan and Jade Kelly and wish them well on their new ventures, and said hello to Tom Rogers (Programme

Manager) and Alice Silk (Administrator) both of whom have settled in well and quickly – it is good to be up to full complement again.

I would like to thank Professor Bob Dellavalle, our first Scientific Advisory Board Chair, who stepped down at the end of 2023, for his work in establishing this important group.

Thank you to all who have supported us over the past year particularly the LEO Foundation, our industry sponsors, national and regional coordinators and the marvellous collaboration with IFPA, ILDS and IPC.

I hope you enjoy reading this year's report.

Professor Chris Griffiths OBE
Director, Global Psoriasis Atlas

The GPA: A Strong Organisation Built to Collaborate

The GPA is a collaboration between three leading international organisations in world dermatology: IFPA; the International League of Dermatological Societies (ILDS); and the International Psoriasis Council (IPC) with The University of Manchester (UoM) as the lead academic institution.

The collaborating organisations are the joint project owners of the GPA. Project success can be attributed to the integrated and synergistic interactions between the academic institution and the three international partner organisations. These organisations represent psoriasis associations around the world, international dermatology societies and the education and empowerment of global key opinion leaders in psoriasis.

IFPA is a non-profit umbrella organisation uniting all people living with psoriatic disease – regardless of where they live, what type of psoriatic disease they have, or how it impacts their lives. IFPA was founded in 1971 and, together with international member associations, represents and advocates for over 60 million people around the world. Read more about IFPA, our members and our activities at www.ifpa-psy.com.

The **International League of Dermatological Societies** has been promoting skin health around the world for over 80 years. The ILDS represents dermatology at the highest level, with 195 Member organisations from more than 90 countries representing over 200,000 dermatologists worldwide. www.ilds.org

The **International Psoriasis Council** is a dermatology-led, voluntary, global, non-profit organization with a network of more than 130 psoriasis experts, thought leaders, and professionals, dedicated to improving patient care around the globe. www.psoriasis-council.org








Our Team

Research Team

-  **Professor Chris Griffiths**
GPA Director
The University of Manchester
-  **Professor Darren Ashcroft**
GPA Research Director
The University of Manchester
-  **Thomas Rogers**
GPA Programme Manager
The University of Manchester
-  **Dr Alison Wright**
GPA Research Fellow
The University of Manchester
-  **Dr Ahmad Aalemi**
GPA Research Fellow
The University of Manchester
-  **Dr Paul Dimmock**
GPA Research Associate
The University of Manchester
-  **Alice Silk**
GPA Administrator
The University of Manchester

Collaborating Organisations

-  **Arpita Bhose**
ILDS Chief Executive Officer
London, UK
-  **Jennifer Kilmer**
ILDS Global Skin Health
Project Coordinator
London, UK
-  **Christy Langan**
IPC Chief Executive Officer
California, USA
-  **Frida Dunger Johnsson**
IFPA Executive Director
Sweden
-  **Dr Sicily Mburu**
IFPA Scientific Officer
Sweden

Board of Governors

-  **Professor Henry Lim**
Chair of the Board of Governors,
President of the ILDS
Detroit, USA
-  **Dr Hoseah Waweru**
President of IFPA
Kenya
-  **Professor Herve Bachelez**
President of the IPC
Paris

National Coordinators

-  **Professor Mario Amaya Guerra**
Mexico
-  **Dr Cesar Gonzalez**
Colombia
-  **Dr Andre Carvalho**
Brazil
-  **Dr Farah Novoa Boza**
Peru
-  **Dr Cristina Echeverria**
Argentina
-  **Dr Enrique Rivas**
Guatemala
-  **Dr Benjamin Hidalgo-Matlock**
Costa Rica
-  **Professor Fernando Valenzuela**
Chile



Regional Coordinators

-  **Dr Claudia De la Cruz**
Chile
-  **Professor Asja Prohic**
Bosnia and Herzegovina
-  **Professor Chris Baker**
Australia
-  **Professor Ricardo Romiti**
Brazil
-  **Professor Mahira El Sayed**
Egypt
-  **Dr Vermen Verallo-Rowell**
Philippines
-  **Professor April Armstrong**
USA
-  **Dr Arnon Cohen**
Israel
-  **Professor Min Zheng**
China
-  **Professor Wayne Gulliver**
Canada
-  **Dr Murlidhar Rajagopalan**
India
-  **Professor Xuejun Zhang**
China
-  **Professor Jacek Szepietowski**
Poland
-  **Dr Colin Theng**
Singapore
-  **Professor Ncoza Dlova**
South Africa
-  **Dr Hazel Oon**
Singapore
-  **Professor Nejib Doss**
Tunisia



Structure and Governance

Board of Governors

Professor Henry Lim
Chair of Board of Governors,
President of the International
League of Dermatological Societies



Dr Hoseah Waweru
President of IFPA



Professor Herve Bachelez
President of the International
Psoriasis Council



The Board of Governors membership includes: the Presidents of the three Collaborating Organisations and other non-voting members. The Board of Governors is chaired by the ILDS President.

Steering Committee

The GPA Steering Committee is chaired by the GPA Director and is composed of a lead from each of the Collaborating Organisations (IFPA, ILDS and IPC), along with the members of the Project Management Team comprising the GPA Research Director, GPA Programme Manager and GPA Administrator.

Regional Coordinators

Part of the GPA Steering Committee.

Collaboration Team

Membership includes executives and members from the Collaborating Organisations and the GPA Programme Manager.

Researchers

Research Fellows, Associates and PhD students.

Scientific Advisory Board

The newly appointed Scientific Advisory Board (SAB) provides the Board of Governors with independent and international scientific oversight of the work of the GPA. They are responsible for reviewing research priorities and advising on significant developments which may affect the GPA.



Professor Luigi Naldi



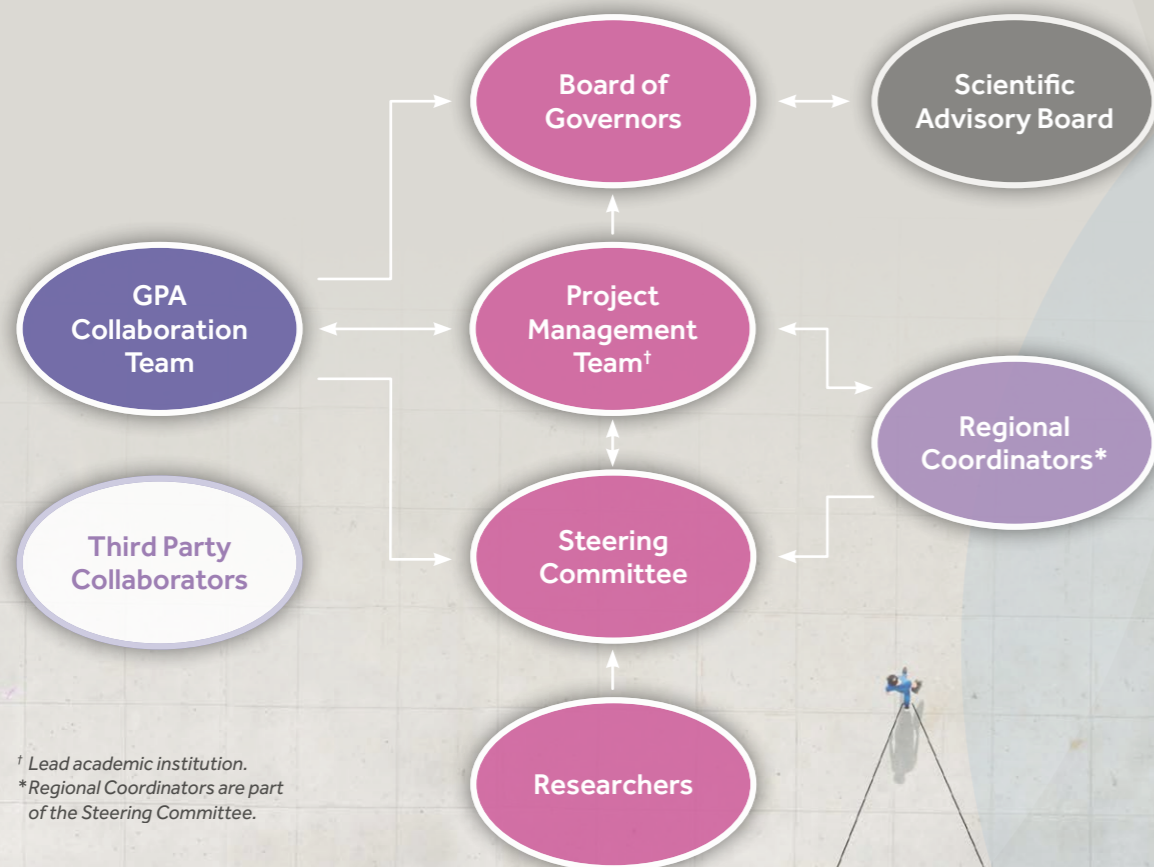
Professor Mohsen Naghavi



Professor Tamar Nijsten



Professor Joel Gelfand



† Lead academic institution.
* Regional Coordinators are part of the Steering Committee.

Areas of research focus Phase II (2023-2026)

Epidemiology of Psoriasis

Implement an extensive update to our large international dataset and provide updated prevalence estimates on a country-to-country basis.

Conduct new epidemiological studies in selected countries, based on existing knowledge gaps, using electronic health records or field work to collect data.

Conduct new epidemiological studies on Generalised Pustular Psoriasis (GPP).

Understand and Characterise the Economic Impact of Psoriasis

Conduct new studies to identify, and then quantify, the use of healthcare resources and associated costs to the healthcare system.

Conduct new studies to understand the impact of living with psoriasis including the impact on health and capability, wellbeing, productivity, access to treatments, and psychosocial burden.

Recognising the Comorbid Disease Burden of Psoriasis

Conduct new studies to improve knowledge about the comorbid disease burden of psoriasis.

Conduct new epidemiological studies to examine the clustering of comorbid diseases in psoriasis.

Improving the Early Diagnosis of Psoriasis

Development of the diagnostic training tool as an online resource to be hosted on the GPA website to support the training of health care professionals on early and correct diagnosis of psoriasis.

Trialling of the clinical diagnostic training tool in other countries.

Our Research

Four Key Research Areas

This section explores the GPA research team's progress over the last year, highlighting our global research collaborations and publications.



Epidemiology of Psoriasis



Understand and Characterise the Economic Impact of Psoriasis



Recognise the Comorbid Disease Burden of Psoriasis



Improve the Early Diagnosis of Psoriasis





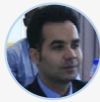
Professor Darren Ashcroft
GPA Research Director



Dr Alison Wright
GPA Research Fellow



Dr Ahmad Aalemi
GPA Research Fellow



Dr Paul Dimmock
GPA Research Associate



Finally, the GPA are delighted to be hosting Dr Bryan Guevara (IPC Fellow, Philippines) who will spend time with us in November and December in the UK. Bryan is leading a project examining the burden of psoriasis experienced by people in the Philippines and we look forward to reporting on these important findings later this year.

Epidemiology of psoriasis in Newfoundland and Labrador, Canada

Newfoundland and Labrador is the easternmost province in Canada and the second smallest, with an approximate population of 525,000 people.

The majority (>95%) of the population are of either English or Irish descent. Since 1760, when there were around 20,000 settlers, the population has grown naturally to reach 200,000 in 1890. A founder effect has been observed in Newfoundland for many Mendelian disorders. The incidence and prevalence of psoriasis in the NL population has not been formally studied, although provincial dermatologists report an increased burden of psoriasis.

In collaboration with the GPA, researchers aimed to establish the incidence and prevalence of psoriasis in Newfoundland and Labrador, as well as examine variation in the onset of psoriasis by age, gender, and region. The Newfoundland and Labrador Centre for Health Information (NLCHI) provided provincial Electronic Health Records (EHR) that were used to identify patients with psoriasis. Patients with psoriasis were identified through the International Classification of Diseases 9th revision (ICD-9) code 696 from January 1, 2009, to March 31, 2019.

The study found that the mean incidence of psoriasis was 380 new cases per 100,000 people (range 270–410 per 100,000), with a slightly higher prevalence among females for all years. The peak incidence of psoriasis was found to occur in the mid-50s for males and females. The period prevalence of psoriasis was 6.89%, and over 81 communities with a population of over 200 people had a psoriasis prevalence between 6 and 9%. Researchers are now working with the Global Psoriasis Atlas team to further analyse their results on the incidence and prevalence with respect to age, sex, and regional distribution.

Epidemiology of generalised pustular psoriasis in Malaysia

Generalised pustular psoriasis (GPP) is a rarer form of psoriasis which greatly impacts patients' physical health, mental health, and quality of life.

It is characterised by recurrent, sudden eruptions or flares of painful, pus-filled blisters over large areas of the skin. The extent and severity of symptoms varies widely between patients, as well as between each flare experienced by an individual patient. While some patients will experience multiple flares per year, others may only experience a flare every few years. GPP flares are often provoked by triggers, including withdrawal of treatment with systemic corticosteroids, infections, pregnancy, menstruation, and stress. While many affected individuals have features only of GPP, some will also develop features of plaque psoriasis either before or after GPP appears.

Due to the rare nature of the disease, few studies have examined the burden of GPP. Having data on the epidemiology of GPP is essential to

Introduction from Professor Darren Ashcroft

I am delighted to report that we have had a fantastic start during the first year of Phase III of the Global Psoriasis Atlas. In this annual report we highlight several new papers published over the last year that improve our understanding of psoriasis epidemiology and uncover how it affects both the individual and society at large. Firstly, Dr Alison Wright reports on a new study examining the incidence and prevalence of generalised pustular psoriasis in Malaysia and Dr Teng-Chou reports on work we published on fertility trends and pregnancy outcomes for women with psoriasis. We also successfully completed a point prevalence field study in the Eastern Cape of South Africa and provide details on that work too.

It has been a pleasure to meet with so many of our collaborators at the EADV annual congress, the World Congress of Dermatology, and the AAD Congress to explore opportunities for future research. We have also actively supported the development of other dermatology atlases, building on the success of the Global Psoriasis Atlas.



Clinical presentation of GPP

ensure adequate resource allocation for effective management.

We have collaborated with Dr Choon Siew Eng, and her team in Malaysia, to examine trends in the incidence and prevalence of GPP and characterise the frequency of flares and trigger factors of flares in Johor Bahru, Malaysia for the first time.

We used electronic health record data routinely captured in the Malaysian Teleprimary Care (TPC®) clinical information system. TPC is a locally developed clinical information system that links public primary and secondary care facilities providing information on routine medical examinations, diagnoses and disease surveillance, laboratory results and pharmacy data. The TPC system contains data on over 1.2 million individuals residing in the Johor Bahru district.

Between 2010 and 2020, 230 Malaysians had dermatologist-confirmed GPP resulting in an overall period prevalence rate of 198 per million (95% confidence interval 172–224). Women had a higher prevalence

of GPP than men (267 vs. 127) and prevalence was highest among the Chinese population (271 per million), followed by the Malay population (186 per million) and Indian population (179 per million). Prevalence rates increased modestly between 2010 and 2020 from 178 per million in 2010 to 294 per million in 2020.

Of the 230 patients with GPP, 153 (67%) also had plaque psoriasis. Period prevalence of GPP with psoriasis was 132 per million and for GPP without psoriasis was 66 per million. Men and Indians were more likely to have GPP with psoriasis whereas women and Malays were more likely to have GPP without psoriasis.

The overall incidence of GPP was 27.2 (95% CI 22.8–31.6) per million person-years, with higher rates observed in women than men; 35.3 (28.4–42.2) vs. 18.3 (13.1–23.5) per million person-years, respectively. Patients from Chinese ethnic groups had the highest incidence rates; Chinese 41.6 (28.9–54.3), Indian 25.0 (13.8–36.3), and Malay 24.6 (19.4–29.7) per million person-years.

The mean age at GPP onset was 42.7±18.4 years; age of onset was ~7 years earlier in people with GPP without psoriasis than those with psoriasis (37.5±20.7 vs. 44.9±17.0 years). A modest bimodal age distribution was observed, with first and second peaks of onset at age 20–29 years and age 50–59 years, respectively. This trend was seen in women (age 20–29 years and age 40–49 years), men (age 20–29 years and age 60–69 years), and people of Malay (age 20–29 years and age 40–49 years) and Chinese (age 20–29 years and age 50–59 years) ethnicity.

Most GPP patients (79%) had at least one moderate-to-severe flare with pustular eruptions affecting more than 10% of the body. Patients experienced, on average, 1.3±0.7 flares per year with a female, Malay, and Chinese preponderance. Flares occurred more frequently in GPP patients without

psoriasis than in GPP patients with psoriasis. Common factors reported by patients precipitating a flare included withdrawal of medication (systemic corticosteroids followed by systemic non-biologics), infections (predominantly upper respiratory tract infections), use of medications (mainly steroids and traditional medicine), pregnancy, stress, traditional medicine, and menstruation.

This study found that GPP is more common in the Johor Bahru district of Malaysia than previously reported in other countries with variation in the incidence and prevalence by age, sex, ethnicity, and differences in age of onset, flare frequency and trigger factors among GPP patients with and without plaque psoriasis. Our findings contribute to the global mapping of GPP which will help to inform the management of this rare condition.

You can read the full results from this study in our recently published paper in the British Journal of Dermatology (<https://doi.org/10.1093/bjd/ljad158>) and watch our video giving an overview of this study here

<https://youtu.be/XPzk3Xnv7Dg>



Fertility trends and adverse pregnancy outcomes in female patients with psoriasis in the UK

Women with psoriasis are often diagnosed before the age of 40, coinciding with the peak reproductive period.

Other inflammatory diseases have been associated with negative pregnancy outcomes. This may be influenced by the presence of other long-term conditions (co-morbidities) or other lifestyle factors, such as smoking, that could lead to poor fertility and pregnancy outcomes. In addition, women with psoriasis should receive appropriate counselling regarding the need for effective contraception when using some systemic medications. Previous studies examining these potential risks using disease registries have been based on small sample sizes and have been unable to estimate the association of fertility and adverse pregnancy outcomes in women with psoriasis when compared to women without psoriasis in the general population.

We conducted a large population-based cohort study using the UK primary care database, the Clinical Practice Research Datalink (CPRD) from 1998 to 2019 and the pregnancy register. The CPRD provides longitudinal health records from primary care, and records regarding timing and outcomes of pregnancies can be accessed from the pregnancy register. We followed 63,681 women with psoriasis aged 15 to 44 years. For each woman with psoriasis, five comparator women without psoriasis from the same primary care practice were selected and matched on year of birth, and 318,405 comparators without psoriasis were included.

We calculated the fertility rate (number of pregnancies over time) and compared the risk of adverse pregnancy outcomes (venous thromboembolism, antenatal haemorrhage, preeclampsia, gestational hypertension, gestational diabetes and caesarean) and birth outcomes (live-birth, pregnancy loss, still-birth, and pre-term birth) between women with psoriasis and the matched comparators.

Overall, we observed that women with moderate to severe psoriasis had fewer pregnancies (rate ratios: 0.75, 95%CI: 0.69 to 0.83) compared with matched comparators over the study period. Pregnancies in women with psoriasis were also less likely to be livebirth (OR: 0.91, 95%CI: 0.88 to 0.93) and more likely to involve pregnancy loss (OR:1.06, 95%CI: 1.03 to 1.10). More than 95% of the pregnancy losses in women with psoriasis occurred in the first three months. There was no difference in the risk of most adverse pregnancy outcomes between women with psoriasis and matched comparator, but pregnancies in women with psoriasis were more likely to experience venous thromboembolism (OR:1.31, 95%CI: 1.07 to 1.59).

In summary, we found that women with moderate to severe psoriasis had a lower fertility rate, and the risk of pregnancy loss was higher than in matched comparators without psoriasis. Building on these findings, future research should identify the mechanism of increased risk of pregnancy loss among patients with psoriasis.

Fertility trends and adverse pregnancy outcomes in female patients with psoriasis in the United Kingdom

Study Methods

UK nationwide cohort study

63,681 females with psoriasis aged 15 to 44 years and 318,405 age and General Practice-matched females without psoriasis.

We compared

the fertility rate* and the risk of adverse pregnancy outcomes and birth outcomes between females with psoriasis and females without psoriasis.

Adverse Pregnancy Outcomes

- Venous thromboembolism
- Gestational hypertension
- Gestational diabetes
- Caesarean
- Antenatal haemorrhage
- Pre-eclampsia

Birth Outcomes

- Live-birth
- Pregnancy loss
- Still-birth
- Pre-term birth

*number of pregnancies over time

Study Results

Annual Fertility Rate



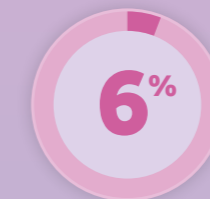
Females with moderate to severe psoriasis have 25% fewer pregnancies compared with females without psoriasis over the study period.

Pregnancy Outcomes

No significant difference found between females with psoriasis and females without psoriasis for:

- antenatal haemorrhage
- pre-eclampsia
- gestational hypertension
- gestational diabetes
- caesarean

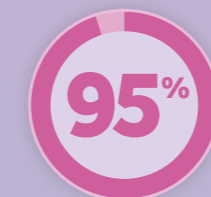
Birth Outcomes



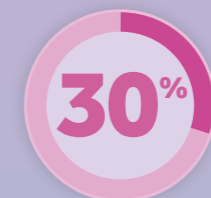
Females with psoriasis are 6% more likely to have pregnancy loss.



Females with psoriasis are 9% less likely to have a live-birth.



More than 95% of pregnancy loss in females with psoriasis occurred in the first three months.



Females with psoriasis are 30% more likely to have venous thromboembolism in pregnancy. The study found the increased risk was related to their comorbidities.

SKINSCAPE:

Skin Disease in the Eastern Cape, South Africa

December 2023

SKINSCAPE

A GLOBAL PSORIASIS ATLAS PROJECT



The team

UK

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Rebekah Swan
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Israel

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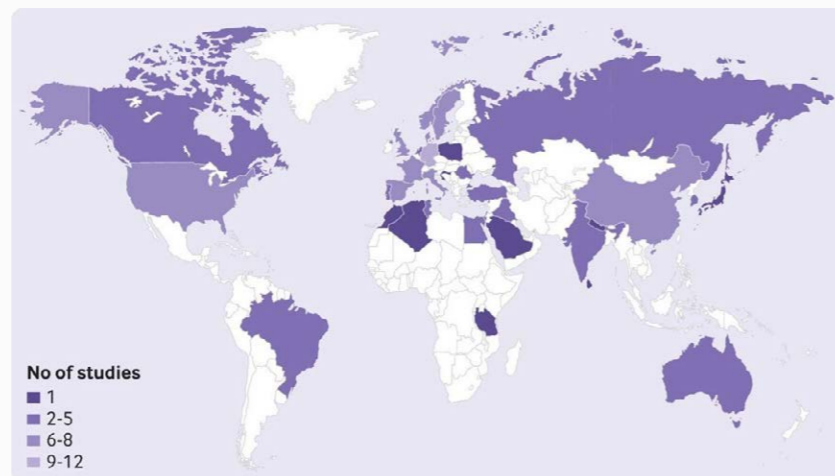
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Suretha Kannenberg
Jacob Sons
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Why the Eastern Cape?

For many skin diseases, inequalities in care are a result of a lack of knowledge, understanding of the disease prevalence, and delays in diagnosis and treatment. This can be even more profound in countries that are recipients of official development assistance (ODA) such as Sub-Saharan Africa. Data on the number of people who have skin diseases are sparse throughout the African continent, which was highlighted in our systematic review of the worldwide epidemiology of psoriasis (Parisi R et al. *BMJ* 2020; <https://doi.org/10.1136/bmj.m1590>). Without these data, it is challenging to target resources effectively and improve access to care.



Number of studies reporting psoriasis prevalence by country. White indicates countries with no observed data (Parisi R et al. *BMJ* 2020).

The Eastern Cape is one of nine provinces in South Africa.



Since 2019, we have been working with Professor Ncoza Dlova (GPA South Africa Regional Co-Ordinator) to improve research capacity and access to sustainable health in Sub-Saharan Africa. As part of this, the GPA team, in collaboration with our Regional Dermatology Training Centre colleagues in Moshi and Professor Dlova, conducted a pilot survey of skin disease in Maasai people in Tanzania (Kahn et al. *BJD* 2023; <https://doi.org/10.1093/bjd/ljac065>). This groundwork laid the foundation for the GPA to complete the first-ever cross-sectional point-prevalence study of skin disease in South Africa (Eastern Cape), documenting in greater detail the prevalence of all skin diseases, with a focus on psoriasis and atopic dermatitis (in collaboration with Prof Carsten Flohr, Global Atopic Dermatitis Atlas), in this part of Africa.

The Eastern Cape is one of nine provinces in South Africa. It is an under-resourced province and the poorest

in South Africa with high levels of poverty, illiteracy, and unemployment. Rural residents struggle to access healthcare services, in part due to a lack of transportation, and face barriers to treatment due to socio-economic reasons. Very little is known about the spectrum, distribution, and burden of skin disease in this region.

Where did we go?

In December 2023, the team, comprised of dermatologists from the UK, Israel, and South Africa, GPA researchers, and industry partner volunteers (UK & France), travelled to King William's Town (Qonce), ~40 minutes west of East London. The survey was conducted across 6 days in two rural villages, namely Mtyholo Dlova and Mdolomba.

During the fieldwork, the team faced varying weather conditions, experiencing days with temperatures soaring to 31 degrees Celsius and

abundant sunshine, while others brought cooler temperatures of 17 degrees accompanied by wind and rain.

What did we do?

The team gained ethical approval from the University of Manchester, the University of KwaZulu-Natal, and local permissions in the Eastern Cape to conduct this research. The communities in the two villages were then sensitised to the study.

The SKINSCAPE team, along with local community workers who guided us through the villages and acted as interpreters, conducted house-to-house visits to collect consent from participants, their household information, and to examine their skin to identify any skin conditions. REDCap software, a secure website and app, was used to build the surveys, collect, and store the survey data. Data was entered into encrypted portable tablet devices using the REDCap app.

Participants with psoriasis, atopic dermatitis, or other skin conditions that needed further examination were invited to attend the community hall. At the community hall, more detailed information was collected on psoriasis and atopic dermatitis including severity, comorbidities, and treatment. We also had the opportunity to take medical photographs of participants' skin (from those who consented) which will be used for educational purposes, guiding people in how skin diseases present in skin of colour. The dermatologists based in the community hall were also able to provide emollients and referrals to local hospitals for additional assessment and treatment, where needed.

What did we find?

The team visited a total of 309 households, 94 in Mtyholo Dlova and 215 in Mdolomba, with 715 people recruited into the study (218 in Mtyholo Dlova, 497 in Mdolomba). Dwellings in the villages were standalone houses including traditional round huts which had rainwater tanks for drinking water. Nearly all homes had electricity and in most, sanitation facilities consisted of pit latrines. The majority of households had an average monthly income of <3000 South African Rand (£129), with a fifth of households having <R1500 (£65). Two contributing factors for this was high unemployment amongst working age people and people in retirement (age

60+) receiving a state pension.

In total, 439 people were identified as having at least one skin disease, with 100 different conditions identified in this population. The overall point prevalence of any skin disease was 62.9% (95% CI 59.2-66.5%). The top 10 most prevalent skin conditions seen were:

1. Acne vulgaris
2. Xerosis cutis
3. Tinea capitis
4. Melasma
5. Seborrhoeic keratosis
6. Pityriasis alba
7. Seborrhoeic dermatitis
8. Postinflammatory hyperpigmentation
9. Nonscarring alopecia
10. Scarring alopecia

Atopic dermatitis was more commonly seen than psoriasis; prevalence 2.3% vs. 0.3%.

The prevalence of skin diseases was broadly similar across the two villages, but we did observe sex-specific differences in the presence of certain conditions; alopecia (scarring and nonscarring) and melasma were more prevalent in women whereas pseudofolliculitis barbae and tinea capitis was more common in men.

Impact

The team is committed to creating a lasting impact and fostering a legacy of knowledge and support for the communities involved. The local young people of Mtyholo Dlova and Mdolomba who volunteered as community workers were provided with training in data collection and diagnosis of skin conditions by the dermatologists. By the end of the study, the community workers were able to diagnose common skin diseases

themselves and the experience inspired a number of them to pursue an education and career in healthcare in the future.

The collaborative nature of SKINSCAPE fostered a rich exchange of knowledge and insights, particularly with the South African team. The international collaboration has provided a unique opportunity for cross-cultural learning, and the South African team, with their expertise in the presentation and diagnosis of skin diseases on black skin, made invaluable contributions to the broader understanding of dermatological conditions in different populations.

This project also garnered support from various industry partners worldwide, highlighting the importance of such collaborations in advancing dermatological research in underserved regions. Unilever generously donated large bags of skin care products and toiletries for every family of the Mtyholo Dlova and Mdolomba villages. Elsa Taicher (Global Professional Relations Manager, L'Oréal) facilitated the delivery of emollients and sunscreen for distribution by the SKINSCAPE team working in the two community halls and to the local hospital. Dr Zikhona Gxolo, an East London-based dermatologist attached to the Cecilia Makiwane Hospital, expressed her gratitude that so many of the emollients from L'Oréal were donated to the local dermatology clinics for use there due to the severe shortage they had been experiencing.

The GPA team will use the knowledge gained during the visit to refine the survey methodology for future field studies and continue to advocate for outreach engagement, particularly in underserved populations and regions, to provide evidence for better access to care for people with skin disease wherever they may live.

Psoriasis presentation in SKINSCAPE participants



25th World Congress of Dermatology (WCD)

The 25th WCD took place in Singapore in July 2023. During the congress the GPA team manned a large and impressively illustrated exhibition stand.

Staffed by a dedicated team – Programme Manager, Rebekah Swan; Administrator, Jade Kelly; and Research Fellow, Alison Wright – the stand served as a dynamic platform to display key research messages achieved by the GPA over the years. Among the highlights were outcomes from several of our research collaborations, including those in Brazil, Chile, Tanzania, and Greenland.

The team also demonstrated the Psoriasis Training Tool. GPA PhD graduate, Dr Maha Abo-Tabik, used an e-Delphi consensus method amongst dermatology experts to establish a set of diagnostic criteria for chronic plaque psoriasis. Using these criteria, Maha developed a training tool for healthcare providers to help them identify chronic plaque psoriasis correctly. At our exhibition stand, we offered visitors the opportunity to experience the training tool first hand, utilising our tablets to showcase this ground-breaking solution aimed at improving psoriasis diagnosis worldwide.

Our exhibition stand garnered a diverse array of visitors; among them were familiar faces – individuals who already knew about the GPA and approached us to say hello and offer their continued support.

Additionally, we engaged with many of individuals who were introduced to the GPA for the first time at the WCD and expressed interest in understanding the many ways in which they could get involved.



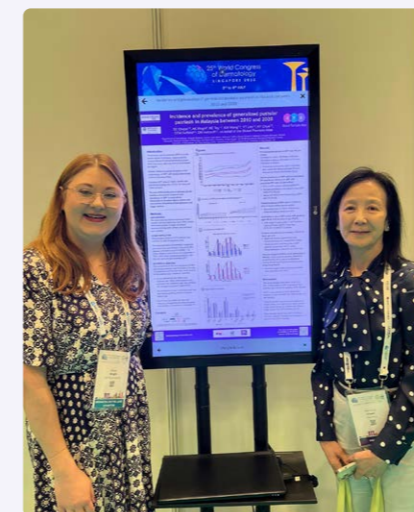
The GPA team at the GPA WCD exhibition stand



Professor Darren Ashcroft presenting an overview of the GPA's ongoing research



Training tool demonstration



Dr Alison Wright and Professor Choon Siew Eng presenting poster

At the Congress, the GPA displayed several posters, including research led by Professor Choon Siew Eng and Dr Alison Wright. Their study focused on analysing the incidence and prevalence of generalised pustular psoriasis in Malaysia from 2010 to 2020. Dr Su Lwin's poster examining the GPA's methodology for psoriasis surveys in Tanzania and Greenland was also presented. Professor Darren Ashcroft presented an overview of the GPA's ongoing research, including our epidemiological studies in Taiwan and Malaysia, and Professor Ricardo Romiti, GPA Regional Coordinator, reported on the epidemiology of psoriasis in indigenous inhabitants in Brazil.



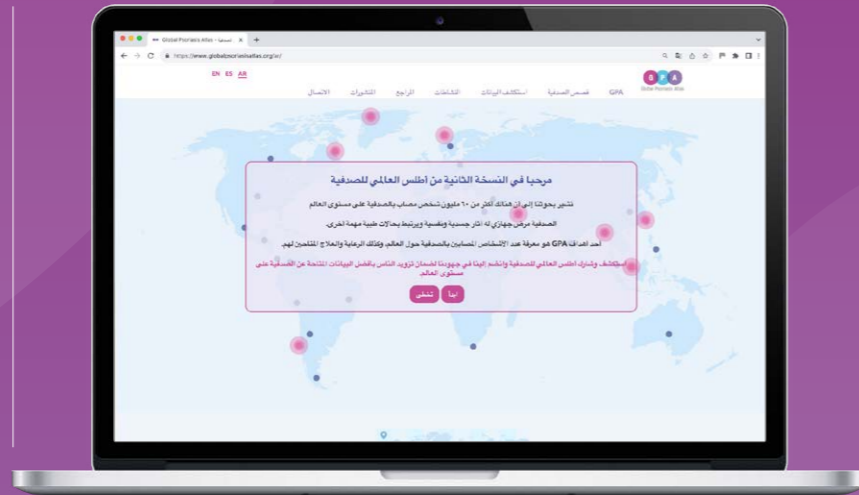
Visitors to the GPA exhibition stand

Digital Developments and Communications

The Global Psoriasis Atlas project has established itself as a recognised and respected brand across a variety of digital platforms.

The GPA has used its online platforms to share information and build rapport and trust with followers. The GPA launched its Twitter account in October 2018, followed by Instagram, Facebook and YouTube in 2019 and LinkedIn in 2021. During that time, our strategy has been to have a consistent online presence by utilising a bank of GPA branded content that we share with followers across all platforms.

The GPA team regularly assesses analytics across all digital outputs with the aim of increasing followers, engagement, impressions and brand awareness. We have seen steady increases in all of these metrics on the GPA website, social media and subscription to the GPA newsletter.



GPA website

To make our website more accessible, the GPA website and all accompanying resources have been translated into Arabic. The Arabic translation of the website was launched on World Psoriasis Day, October 2023.

The GPA website is now available in [Arabic](#), [Spanish](#) and [English](#).

GPA Social Media

The Global Psoriasis Atlas project has established itself as a recognised and respected brand across a variety of digital platforms.

2,733 followers

1,632 followers

1,066 followers

1,037 followers

Please follow [@PsoriasisAtlas](#)



Subscribe to our newsletter for regular updates on research and project progress from Professor Chris Griffiths and the GPA team.



News Bulletin

The American Academy of Dermatology 2024 (AAD)

The GPA Steering Committee and Board of Governors' meetings took place during the Annual Meeting of the AAD in San Diego on Saturday 9th March 2024. The team presented the key research updates, collaborations and future plans including the initial findings from SKINSCAPE. Louise Topping from Janssen and Elsa Taicher from L'Oreal also shared their experiences of volunteering with us in South Africa. We would like to thank all of our industry colleagues for their continued interest in the GPA.



The AAD was also a great opportunity for all the Atlases to meet and discuss future projects. The four Atlases now include the Global Atopic Dermatitis Atlas (GADA), the Global Hidradenitis Suppurativa Atlas (GHISA), and the Global Vitiligo Atlas (GLOVA) as well as the GPA under the umbrella of the ILDS Grand Challenges in Global Skin Health.



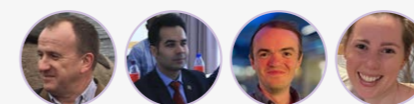
Psoriasis Advocacy Global to Local: Joint reception

On the 4th July 2023 during the 25th World Congress of Dermatology in Singapore the GPA hosted a networking reception along with members from four other esteemed organisations: Burma Skincare Initiative, IFPA, International Psoriasis Council, and PsorAsia. This event brought together international and local organisations, united in a shared mission to improve the care for people with psoriasis. Held on the 69th floor of the Swissotel, the leaders from each organisation addressed the room and shared the work they are doing at local, national and global levels.



GPA Team

It is a time of renewal for the GPA as we said goodbye to Jade Kelly, Administrator and Rebekah Swan, Programme Manager as they moved onto pastures new. The GPA team would like to thank both for their sterling work for the Atlas since its conception. much of the GPA project's success is in no small part down to them.



As we head into 2024 we welcome new staff – Dr Ahmad Aalemi and Dr Paul Dimmock as new members of our research team, Thomas Rogers as our new Programme Manager and Alice Silk as GPA Administrator.

LEO Foundation

We are grateful to The LEO Foundation for their funding support during Phase I and Phase II of the GPA project and are delighted that they will continue as the lead supporter of the GPA during Phase III.



GPA Director, Professor Chris Griffiths said: "I am really delighted that the LEO Foundation continues to fund the GPA in Phase III. The LEO Foundation's funding of the GPA has been instrumental to the success of the Atlas. Phase III funding will allow us to collect the data on the global burden of psoriasis and in turn lead to better access to care for people with the disease wherever they live in the world."



2024-2027 IFD Strategy Meeting in Geneva

In March 2024 Professor Chris Griffiths travelled to the World Health Organization (WHO) in Geneva as part of the ILDS WHO Committee chaired by Prof Lars French. A series of positive meetings included one with the WHO Non-Communicable Disease team led by Guy Fones.

Looking Forward

Collaboration

During Phase III (April 2023-March 2026), the GPA team will be strengthened further by enhanced collaboration with our partner organisations, implementation of regular research and communications meetings, and our planned collaborative work with the WHO.



Team

The GPA has been fortunate to have a team of dedicated and enthusiastic individuals worldwide to help drive each phase of growth. Each team member has contributed time and expertise to the project with enthusiasm and skill. The research team shares a range of skills and knowledge and many years of experience in dermatology, epidemiology, pharmacy, and project administration. Interdisciplinary teamwork in our work on epidemiological mapping and on

our field study visits, is supported by positive leadership and management, effective communication strategies, an appropriate skill mix and the individual characteristics of the team. Since its inception, the project has consistently achieved high-calibre research outputs. For example, our publication in the British Medical Journal, by Parisi et al, 2020, achieved Altmetric Attention Scores ranking in the top 5% of all research outputs tracked.

As part of our plans for 2023-2026 we will:

Implement extensive updates to our large international epidemiology dataset

Conduct field study visits in selected countries

Conduct new epidemiological studies to examine the clustering of comorbid diseases in psoriasis

Conduct studies of clinical diagnostic criteria with our global collaborators

Test data collection tools in field studies with our global collaborators

Develop data collection tools to better understand and characterise the economic impact of psoriasis

Ensure continued publication in high impact journals across our key research areas

Publish the third edition of the Global Psoriasis Atlas

Implementation

According to the World Health Organization, noncommunicable diseases account for 74% of deaths worldwide and are associated with health inequality. For psoriasis, these inequalities manifest in a lack of knowledge and understanding of the prevalence of psoriasis, delays in diagnosis and treatment and underestimation of the associated

comorbid diseases, which also contribute to the health burden. Therefore, establishing prevalence rates and raising awareness of the burden of psoriasis among policy makers are crucial elements in improving access to care. Without these data it is impossible to target resources effectively. Effective education and advocacy are the crucial next steps to convince payers, regulators and governments that

effective management of psoriasis is important both on an individual and a societal basis. The GPA will continue to supply data on the national prevalence of psoriasis. These data will allow IFPA, ILDS and IPC to educate on psoriasis diagnosis and management and advocate for better healthcare resources from a stronger and more defensible standpoint.

GPA workshop at the Regional Dermatology Training Centre, Tanzania, July 2019



Field Study Visits – Phase III

Working with our collaborating organisations and GPA Coordinators, we will conduct field study visits in several countries during Phase III.

This work will utilise existing on the ground infrastructure. We

will expand on prior epidemiological mapping in the country/region and interrogate relevant health records. Our collaborating organisations will provide links and support in countries where field study visits occur. IFPA will participate in field visits in countries

where there is no member association, with the purpose of establishing a patient organisation. We are currently exploring the potential for this fieldwork to take place in India and Southeast Asia.



Africa



India



Southeast Asia

Engagement

We welcome new connections and partnerships!



Here are some of the ways you can get involved:

- Provide financial support
- Collaborate with us
- Support the collection of data on the global burden of psoriasis
- Support our research
- Engage with us on social media

Furthering the high quality research of the GPA requires the support of industry, organisations with relevant data sets, and collaboration across regions and countries.

The GPA Partnership Brochure and video provide details of the types and levels of financial support packages and highlights unique opportunities for involvement in the project.



For further information contact, GPA Administrator, Alice Silk: alice.silk@manchester.ac.uk

Would you like to learn more about the work of the GPA?



Visit our website www.globalpsoriasisatlas.org

Follow us on X, Instagram, Facebook and LinkedIn @PsoriasisAtlas



Visit our YouTube channel

Subscribe to our newsletter: www.globalpsoriasisatlas.org/en/subscribe

The work of the Global Psoriasis Atlas would not be possible without the financial support we receive from our industry partners.

Partnership is a crucial step towards achieving the ambition of the GPA; to ensure that people around the world have access to the best available care and treatment for their psoriasis. We recognise that innovative and strategic partnerships with organisations are key to delivering our milestones and achieving the aims of the Atlas.



LEO FOUNDATION

The **LEO Foundation** is the lead supporter of the Global Psoriasis Atlas and we are grateful for the core, key funding that it has provided throughout Phase I, II and III.

The GPA work in Phase III (2023–2026) has been made possible thanks to grants and sponsorship from Amgen, Almirall, Boehringer-Ingelheim, Bristol Myers Squibb, Janssen and UCB.



Other sources of funding for Phase III, Year 1 (2023–2024): Institute of International Education's Scholar Rescue Fund (IIE-SRF), The Psoriasis Association, International Science Partnerships Fund (ISPF)



Publications, Presentations and Abstracts

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Incidence and prevalence of generalized pustular psoriasis in Malaysia between 2010 and 2020. SE Choon, AK Wright, KE Tey, KW Wong, YT Lim, KY Chua, CEM Griffiths, DM Ashcroft, World Congress of Dermatology, Singapore 2023

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Psoriasis epidemiology: What do we know? Prof Darren Ashcroft, IPC Psoriasis Masterclass, Europe, May 2023

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Availability of therapies across the world – data from the GPA, Prof Chris Griffiths, ILDS Symposium, WCD, Singapore, July 2023



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