

# MANAGEMENT OF PSORIASIS IN LOW INCOME COUNTRIES

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*Professor of Dermatology and Venereology Ain Shams  
University*

*An overview of Psoriasis  
management, situation analysis  
in the Middle East & Africa*

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*May 9th, 2014*

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## Goeckerman

**“The comparative frequency with which psoriasis occurs demands that not only the specialist but the general practitioner should be familiar with effective therapeutic measures directed against it.”**



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**Psoriasis isn't  
contagious , but  
awareness is.**



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# Key Points

**1** • Overview of Psoriasis

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**06**

**2** • Psoriasis in the Middle East & Africa (Egypt)

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**3** • Management of psoriasis with limited resources

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**3** • Challenges and gaps

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**4** • Suggestion of a national strategy

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# Overview of Psoriasis

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*Psoriasis Patients*

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*New concept*

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*Burden of  
psoriasis*

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*Psoriasis causes*

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*Variants of  
psoriasis*

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*Clinical types  
Of psoriasis*

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*Psoriasis march*

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*QOL*

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# Psoriasis Patient



1-3% of the world population

Multifactorial

Systemic

Chronic

Disabling

Relapsing

Hyperproliferative

Comorbidities

Polygenic

Disabling  
Arthritis

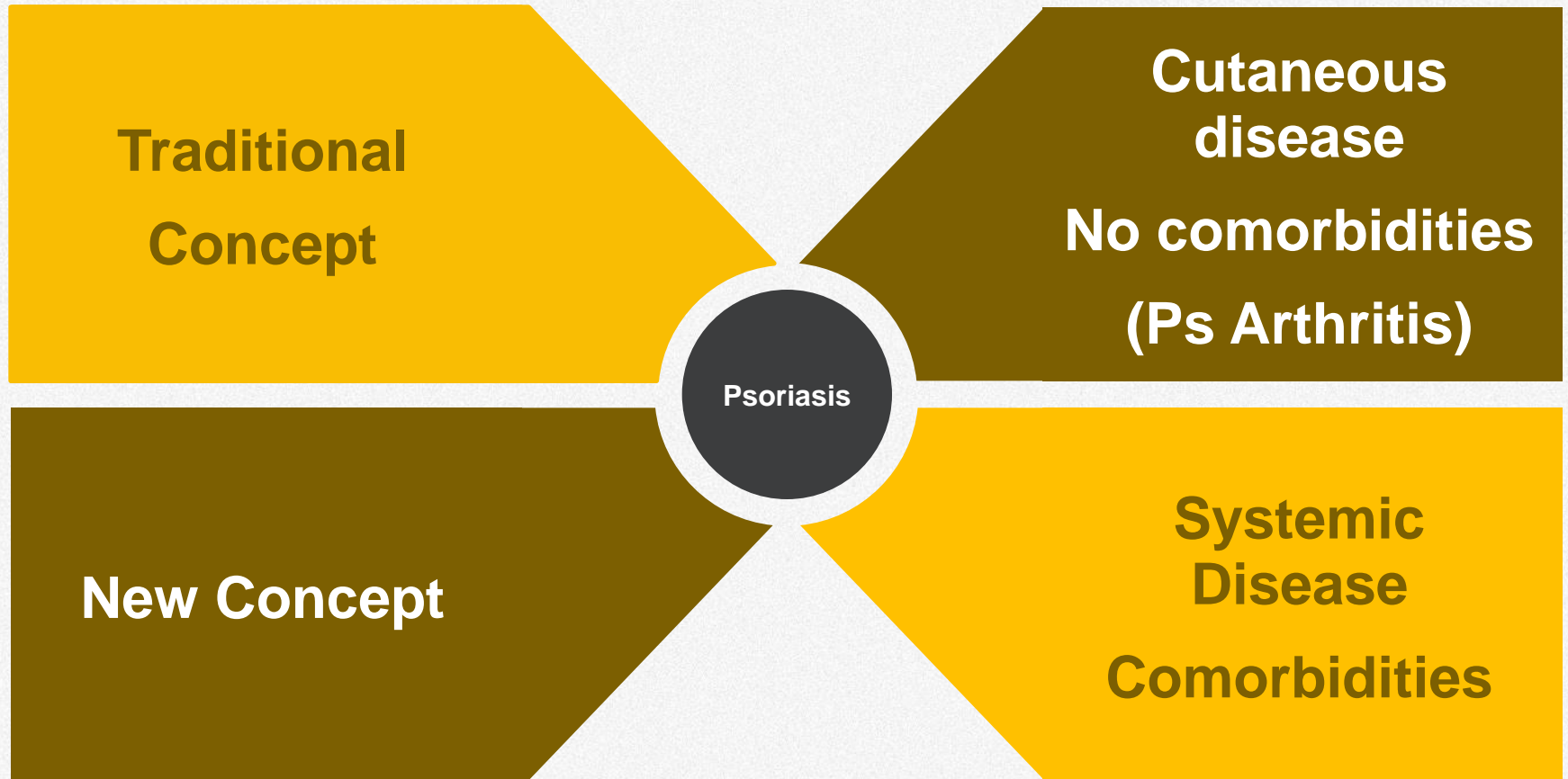
Finger nail pit

Total body skin involvement



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# Psoriasis



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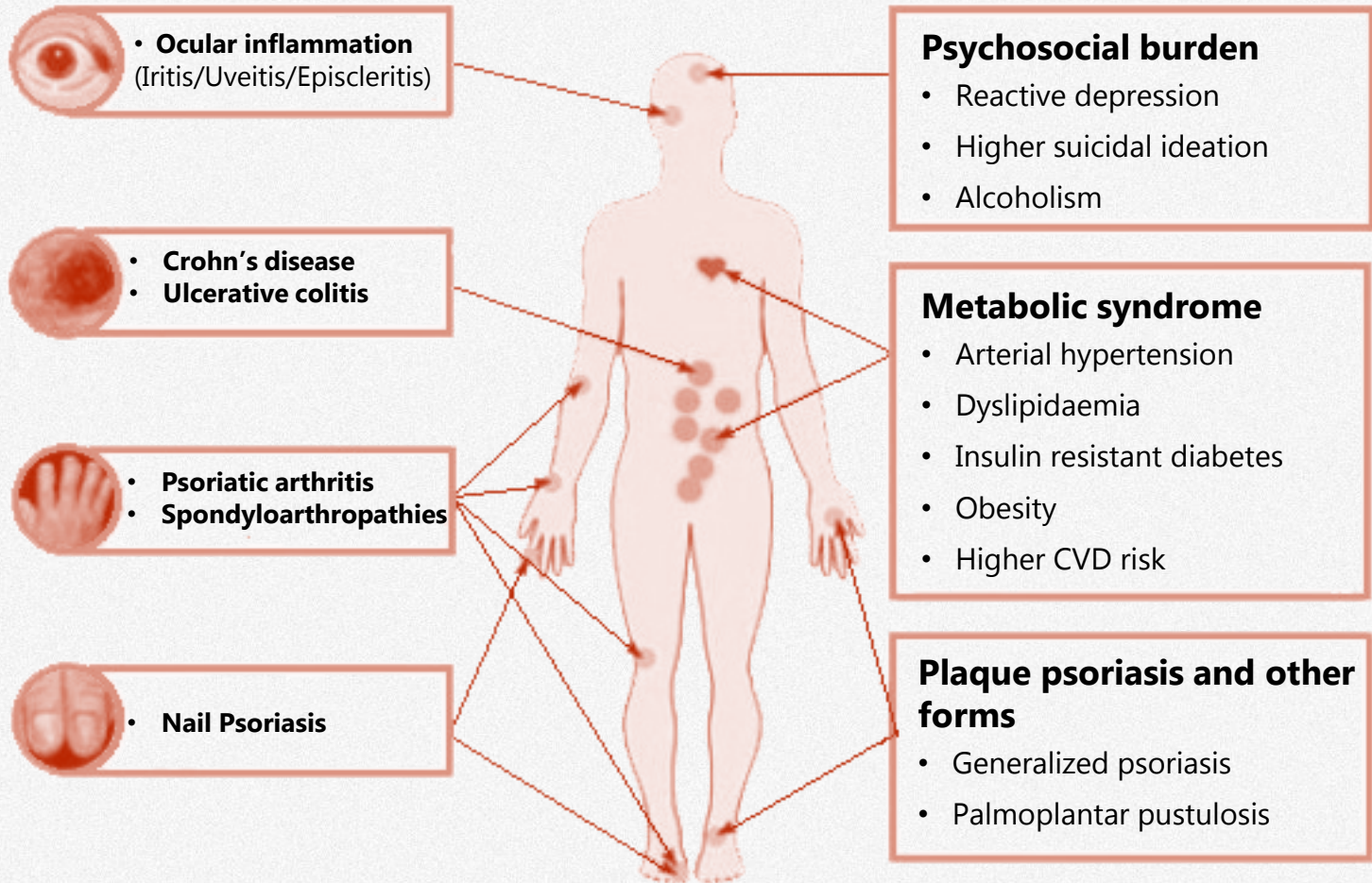
# Cutaneous Polymorphism



**One or  
several  
Diseases?**

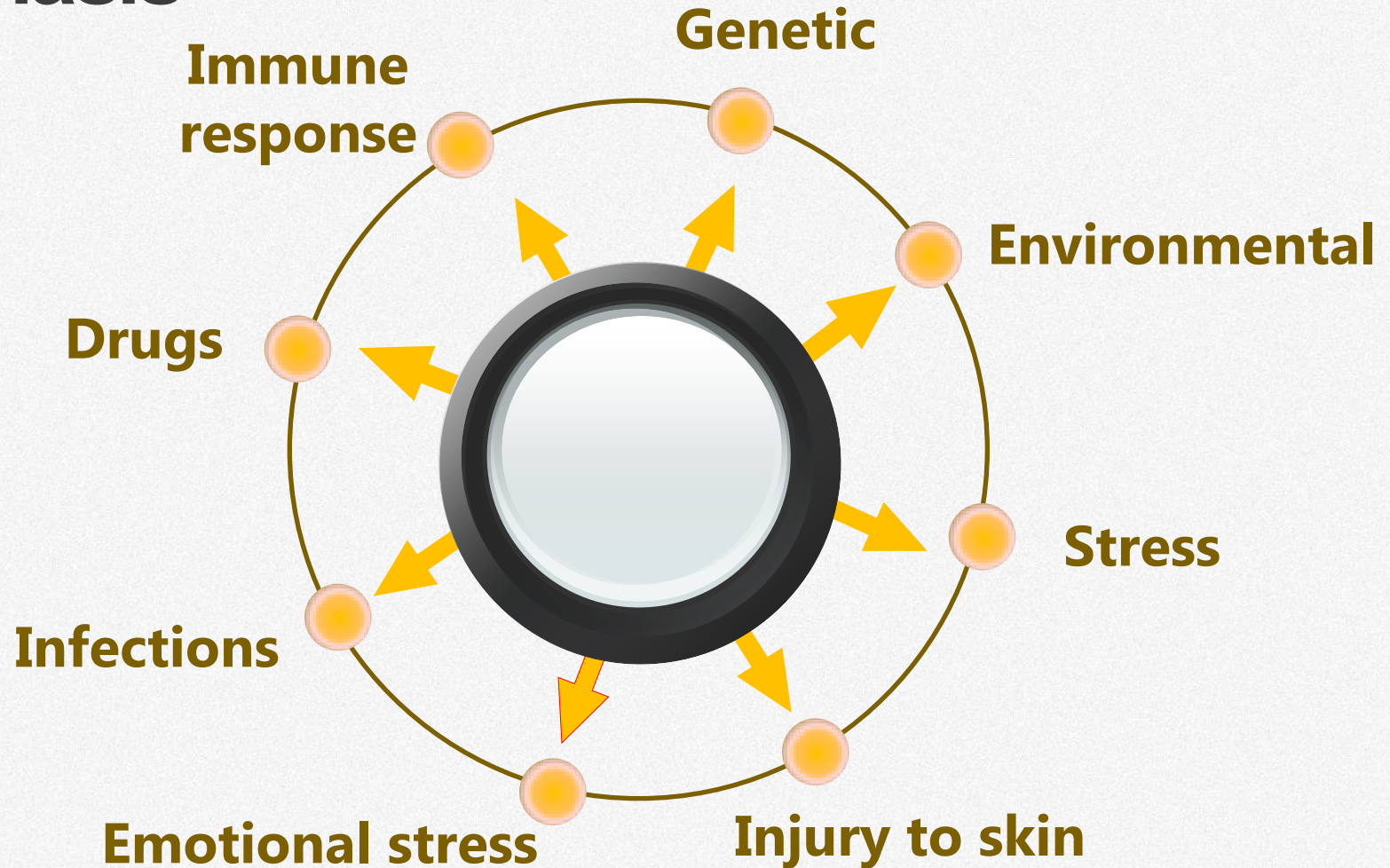


# The burden of Psoriasis



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# What causes Psoriasis



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# Additional factors

## Obesity

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Obesity increases the incidence and the severity of psoriasis

Psoriasis patients eat more as a coping mechanism

## Alcohol Consumption

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Alcohol consumption increases the incidence and the severity of psoriasis

Psoriasis patients drink more as a coping mechanism



## Smoking

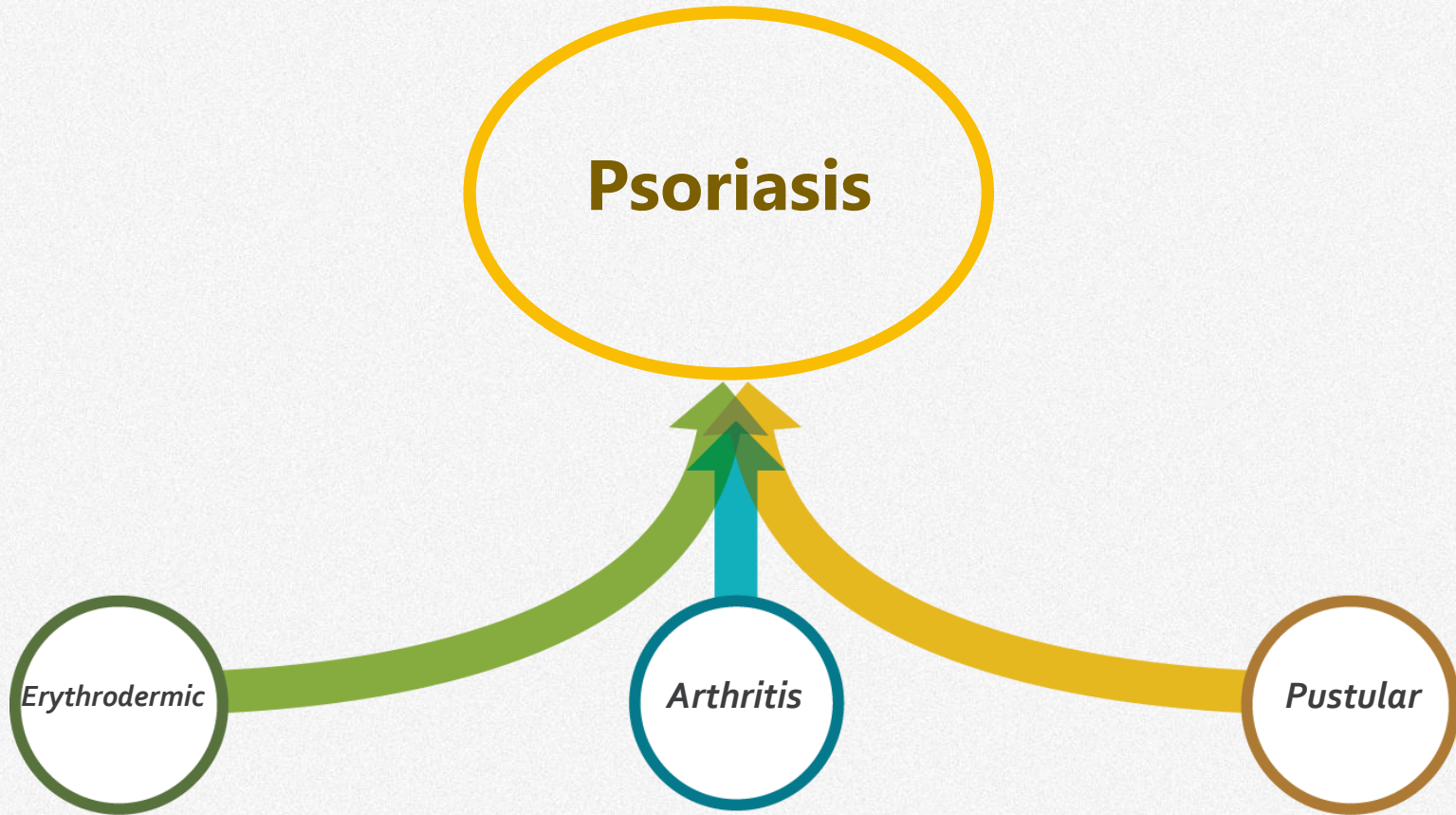
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Smoking increases the incidence of psoriasis

Psoriasis patients smoke more as a coping mechanism

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# Variants of Psoriasis



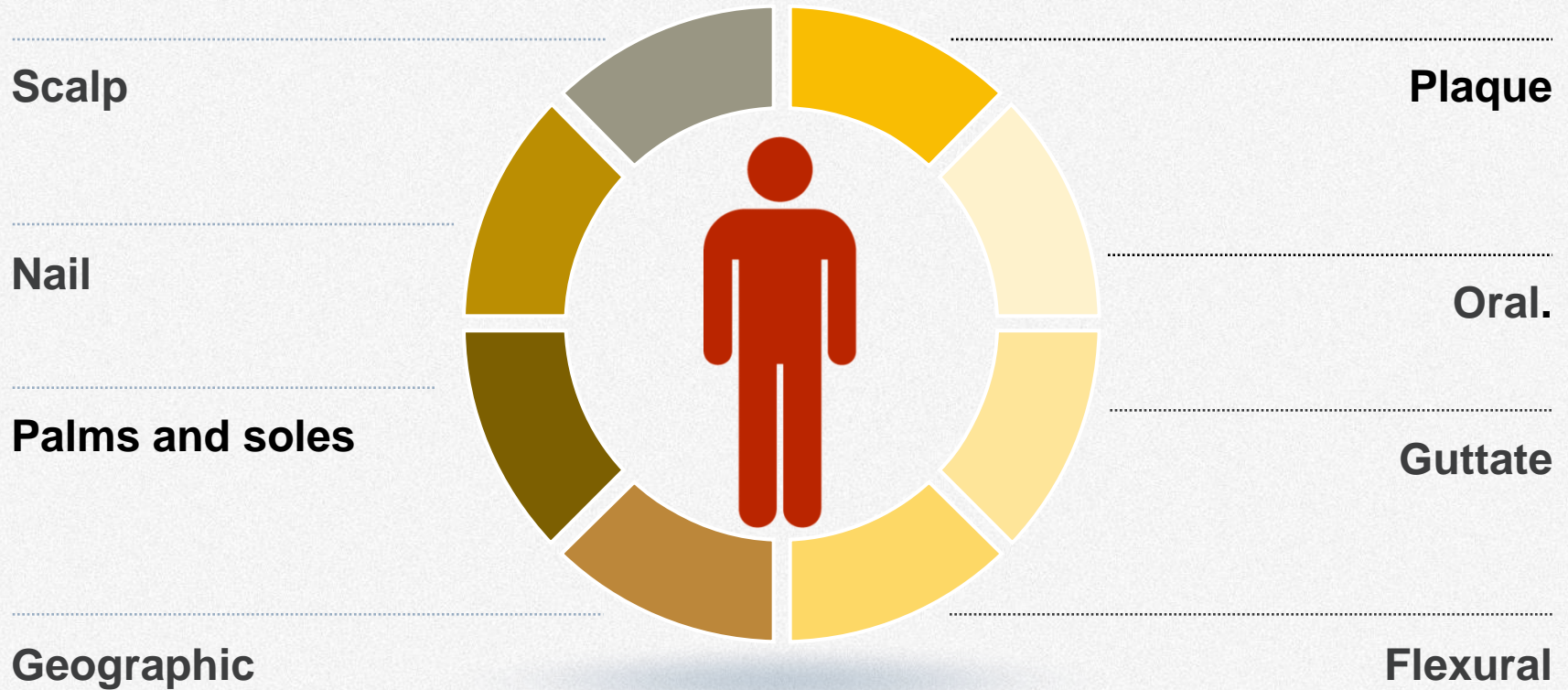
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## Psoriasis in children



*Incidence of psoriasis in children is increasing, estimated by 20% in Egypt.*

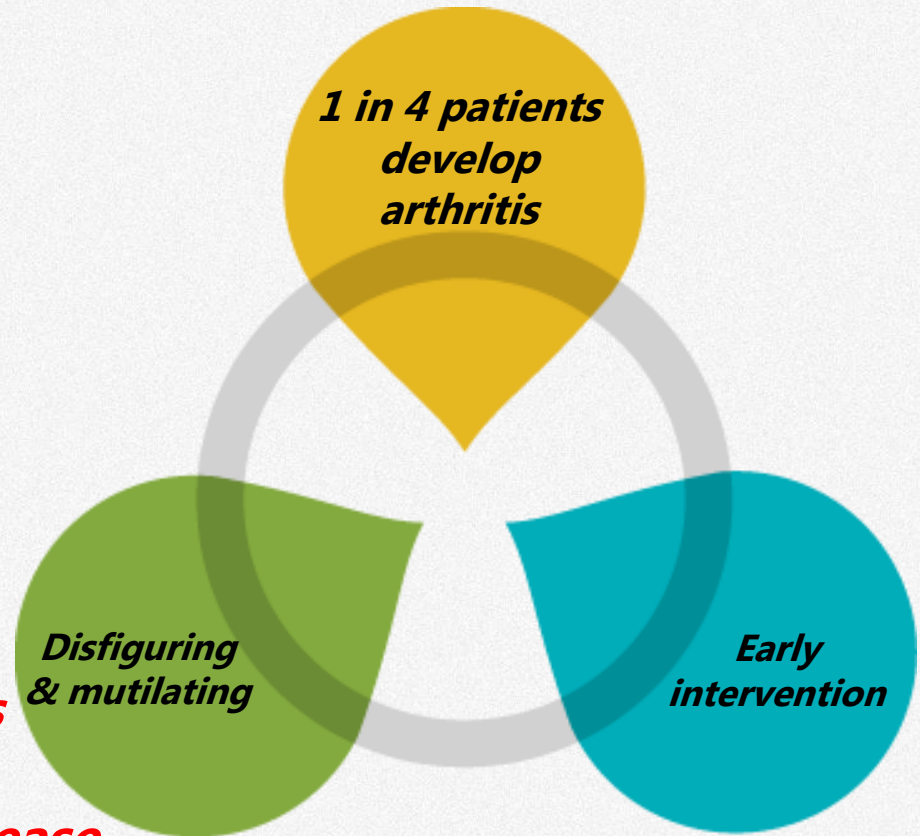
# Clinical types Of psoriasis



# Arthritis



***Inflammatory sero-ve arthritis  
associated with psoriasis.  
Enthesitis, dactylitis & axial disease***



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# How the march of psoriasis unfolds from gene to clinic

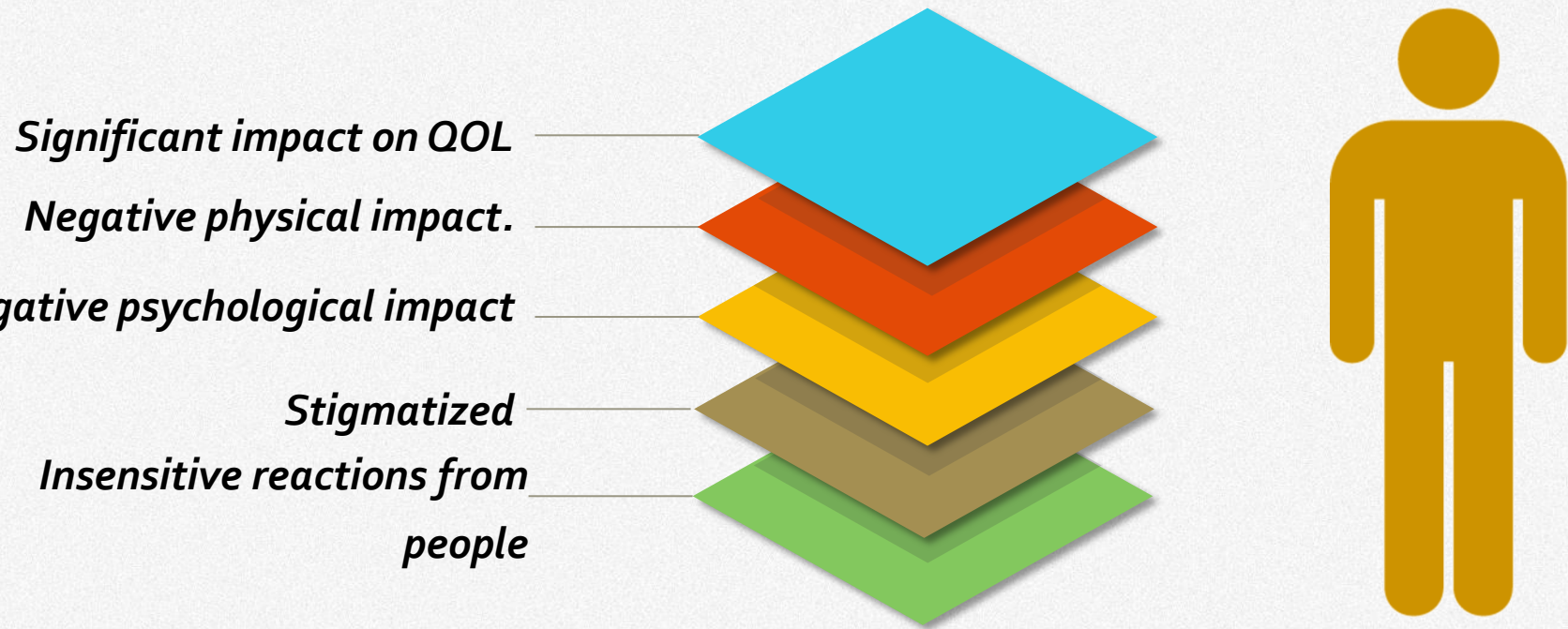


*Griffiths & Barker (2007) Lancet*



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# Impact of Psoriasis on QOL



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# QOL



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*Withdrawal, anxiety and depression*

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*Very low QOL, worse than patients with stroke, COPD, heart disease & diabetes*

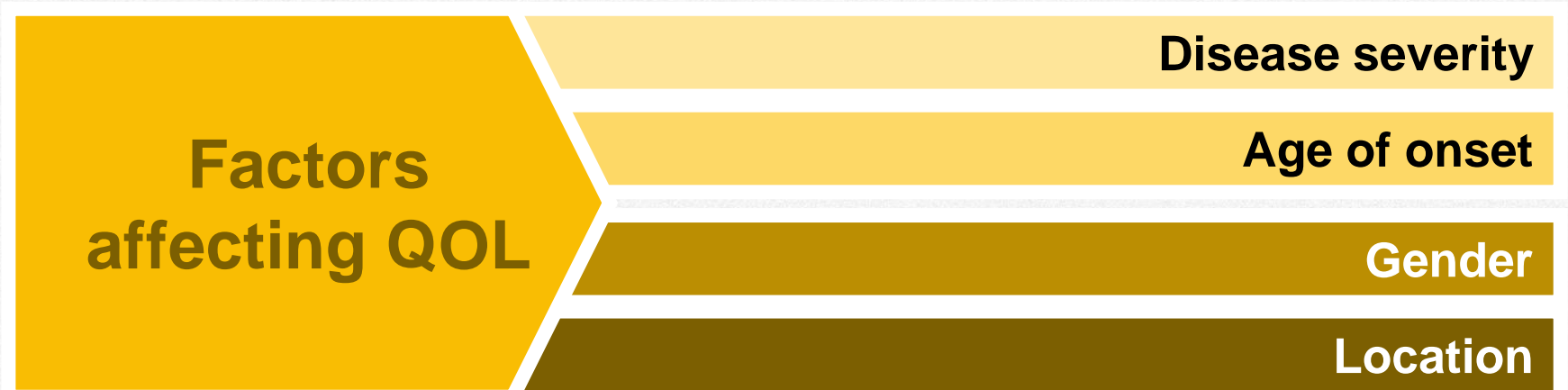
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*Survey by the US National Psoriasis Foundation*

*Psoriasis has a moderate to large impact on QOL in 75% of Psoriasis patients*

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# QOL



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*Underestimated by disease severity score .*

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*Weak association between PASI score and impaired QOL*

---

*Lesions located on visible body parts*

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# QOL

**Psoriasis doesn't  
have to be severe  
to impair the  
quality of life!**

**Scalp psoriasis is visible , persistent  
& inconvenient so it is the most  
difficult aspect of the disease, with  
marked negative Impact on the QOL.**



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# Cumulative Life Course Impairment “CLCI”

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*Cumulative impairment acquired by the psoriasis patient over a life time.*

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*Reflects chronic nature of the disease .*

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*Repercussions including stigmatization physical & psychological comorbidities*

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*Factors playing a moderating role making patient less vulnerable.*

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Actas Dermosifiliogr. 2014;105(2):128-134



ACTAS  
Dermo-Sifiliográficas

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NOVELTIES IN DERMATOLOGY

## Cumulative Life Course Impairment: The Imprint of Psoriasis on the Patient's Life<sup>☆</sup>

S. Ros,<sup>a,\*</sup> L. Puig,<sup>a</sup> J.M. Carrascosa<sup>b</sup>

<sup>a</sup> Departamento de Dermatología, Hospital de la Santa Creu i Sant Pau, Universitat Autònoma de Barcelona, Barcelona, Spain

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Received 5 February 2013; accepted 23 February 2013

Available online 26 February 2014

### KEYWORDS

Psoriasis;  
Stigmatization;  
Depression;  
Anxiety;  
Coping behavior;

**Abstract** We now realize that moderate to severe psoriasis takes a toll on the patient's overall health beyond the effects on the skin itself, and so we use quality of life (QOL) measures to assess how the individual perceives both the impact of disease and the response to treatment. However, available instruments give us a cross-sectional assessment of QOL at a specific moment, and we lack longitudinal studies of how a disease affects each and every aspect of a patient's life over time—including physical and psychological wellbeing, social and emotional

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# Cumulative Life Course Impairment “CLCI “

## *External Factors*



# Cumulative Life Course Impairment “CLCI “

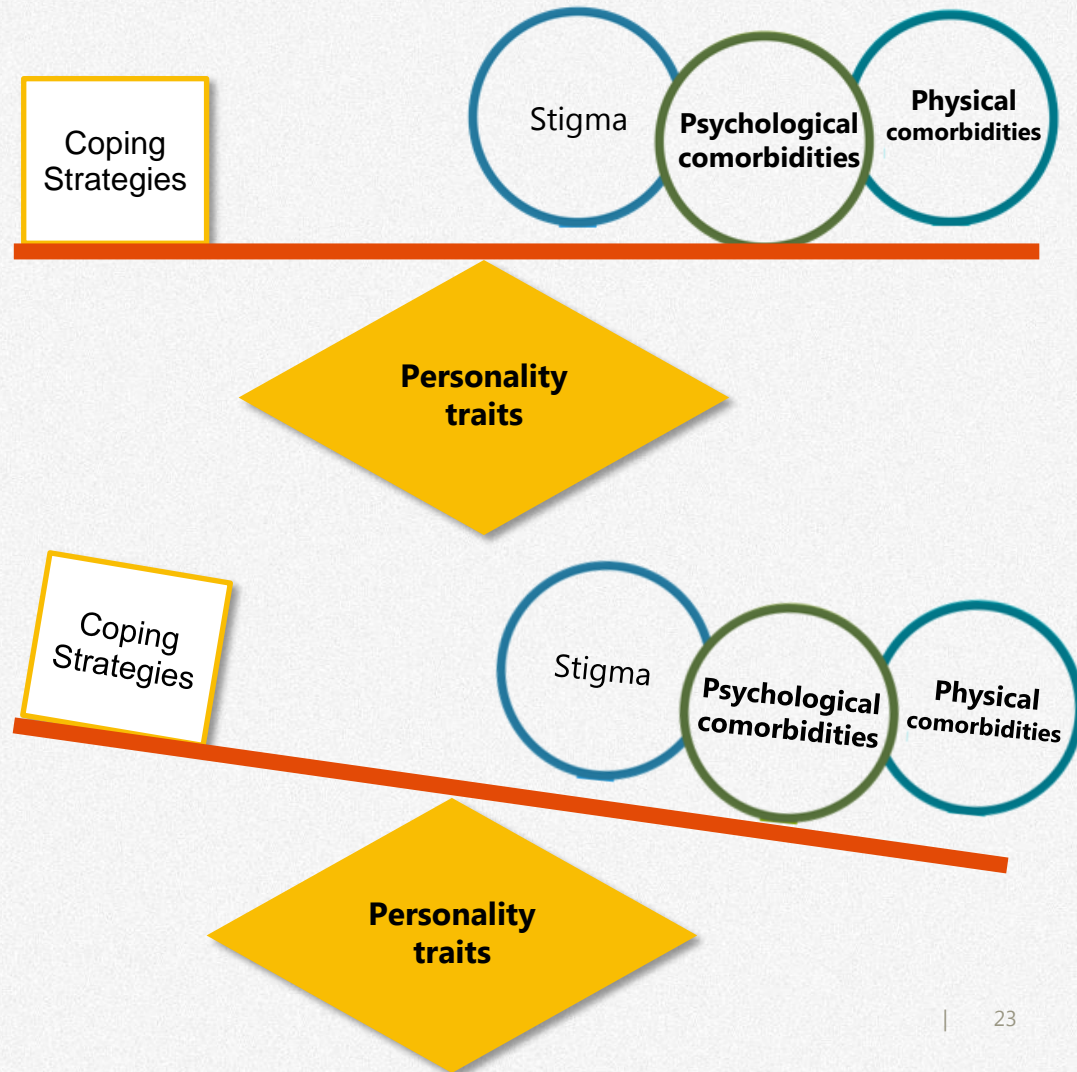
*Patients reported psoriasis had an important influence on major life decisions*

*Choice of work & career*

*Education*

*Marriage and having children*

*Early retirement*



# Comorbidities

**↑ risk of cardiovascular disease (Hypertension & Heart Failure), metabolic syndrome, diabetes & obesity compared with non-psoriatic skin diseases**

**Psoriasis is an independent risk factor for coronary artery calcification, MI & stroke .**

**The risk associated with psoriasis is greatest in young patients with severe disease and increases with age.**

Actas Dermosifiliogr. 2012;103(Supl 1):1-64



**ACTAS**  
**Derma-Sifiliográficas**

Full English text available at  
[www.elsevier.es/ad](http://www.elsevier.es/ad)



## Integrated Approach to Comorbidity in Patients With Psoriasis

E. Daudén,<sup>a</sup> S. Castañeda,<sup>b</sup> C. Suárez,<sup>c</sup> J. García-Campayo,<sup>d</sup> A.J. Blasco,<sup>e,\*</sup> M.D. Aguilar,<sup>e</sup> C. Ferrándiz,<sup>f</sup> L. Puig,<sup>g</sup> and J.L. Sánchez-Carazo,<sup>h</sup> representing the Working Group on Comorbidity in Psoriasis<sup>☆</sup>

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<sup>d</sup>Department of Psychiatry, Hospital Miguel Servet, Zaragoza, Spain

<sup>e</sup>Técnicas Avanzadas de Investigación en Servicios de Salud, Madrid, Spain

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<sup>g</sup>Dermatology Department, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

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### KEYWORDS

Psoriasis;  
Comorbid disease;  
Psoriatic arthritis;  
Diabetes

**Abstract** The relationship between psoriasis and associated diseases has drawn particular interest in recent years. To provide appropriate management of psoriasis from an early stage, it is necessary to include prompt diagnosis of concomitant disease and to prevent and treat any comorbidity found. Such an integrated approach also serves to ensure that the drugs used to treat associated diseases do not interfere with the management of



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# Management of Psoriasis



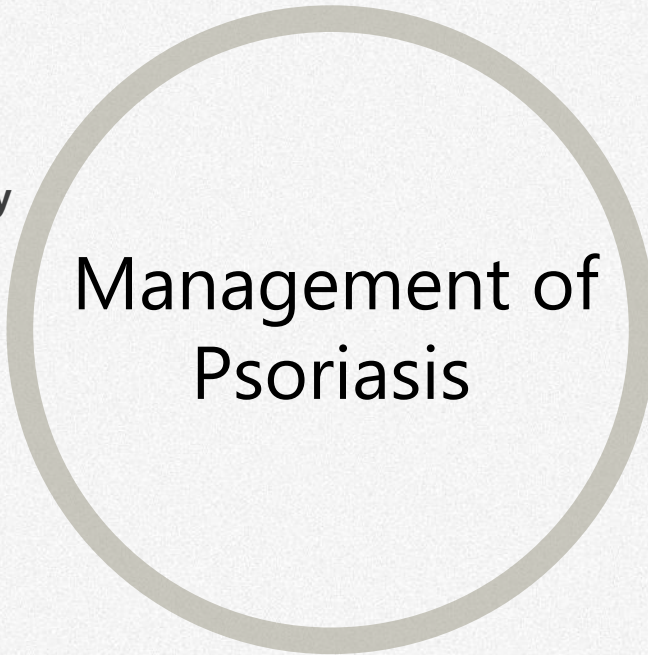
Light Therapy



Climatotherapy



Stop smoking

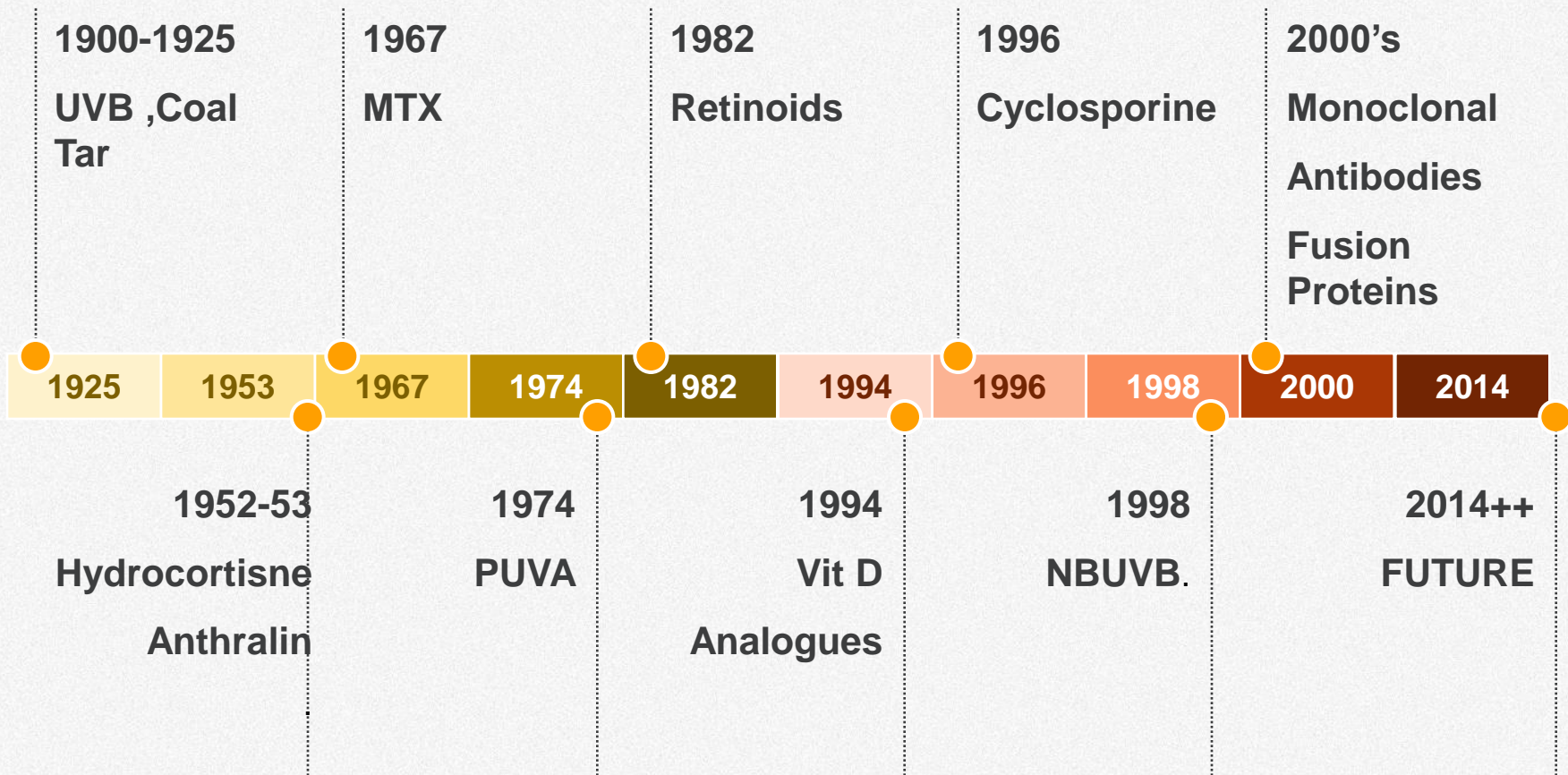


exercise

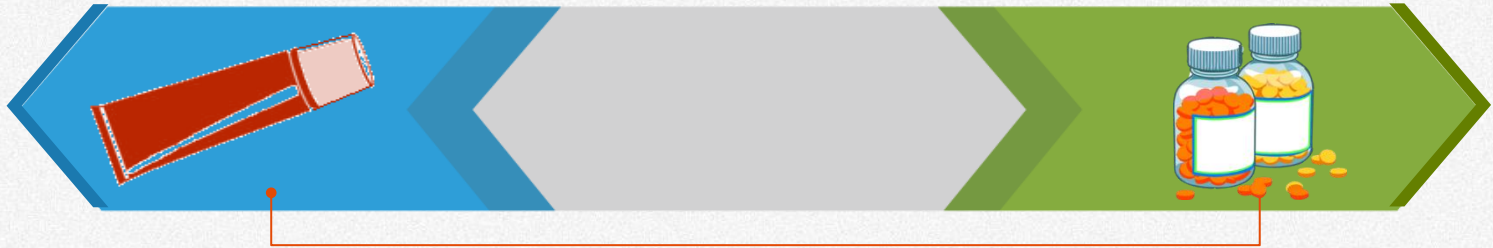


Healthy Diet

# Breakthroughs in Psoriasis therapy



# Treatment of Psoriasis



## Topical treatment

**Steroids.**

**Emollients.**

**Anthralin.**

**Tar.**

**Vit D analogues.**

**Salicylic acid.**

**Retinoids**

**Tazarotene**

## Systemic treatment

**Methotrexate.**

**Cyclosporin.**

**Acitretin.**

**PUVA.**

**NBUVB.**

**Biologics**

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# Long term management

*Individualization  
of therapy*

*Patient's  
Perception of  
severity*

*Reconciling  
extent of disease*

*Potential side  
effects of specific  
treatments*

# Guidelines

M Abdulghani, A Al Sheik, M Alkhawajah *et al.*  
Psoriasis management in Africa and the Middle East

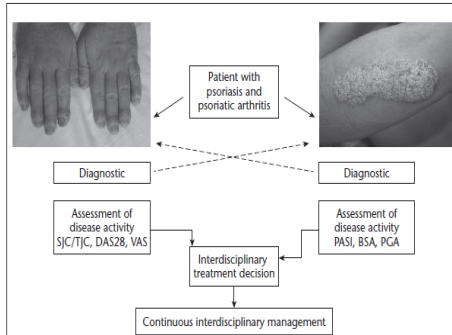


FIGURE 1: Interdisciplinary management approach for patients with psoriasis and psoriatic arthritis (SJC=swollen joint count; TJC=tender joint count; DAS28=Disease

M Abdulghani, A Al Sheik, M Alkhawajah *et al.*  
Psoriasis management in Africa and the Middle East

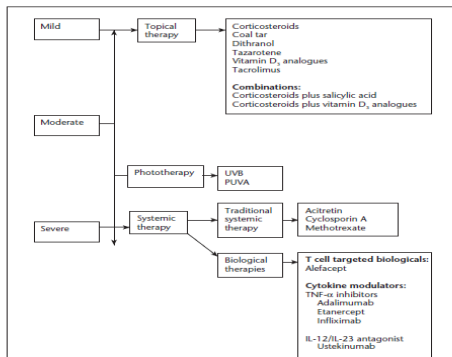


FIGURE 2: Current South African therapeutic recommendations for psoriasis (adapted from Rabeo-Dee *et al.*<sup>28</sup> and reprinted with permission from the South African Medical Journal under a Creative Commons Attribution – Non-commercial Works License; UVB, ultraviolet B; PUVA, oral psoralen plus ultraviolet A; TNF-α, tumour necrosis factor-α; IL, interleukin)

South African

Arch Dermatol Res (2007) 299:111–138  
DOI 10.1007/s00403-007-0744-y

REVIEW

## German evidence-based guidelines for the treatment of Psoriasis vulgaris (short version)

A. Nast · I. Kopp · M. Augustin · K. B. Banditt · W. H. Boehncke · M. Follmann · M. Friedrich · M. Huber · C. Kahl · J. Klaus · J. Koza · I. Kreiselmaier · J. Mohr · U. Mrowietz · H. M. Ockenfels · H. D. Orzechowski · J. Prinz · K. Reich · T. Rosenbach · S. Rossmbeck · M. Schlaeger · G. Schmid-Ott · M. Sebastian · V. Streit · T. Weberschöck · B. Rzyany

Received: 13 February 2007 / Accepted: 14 February 2007 / Published online: 12 May 2007  
© Deutsche Dermatologische Gesellschaft 2007

**Abstract** Psoriasis vulgaris is a common and chronic inflammatory skin disease which has the potential to significantly reduce the quality of life in severely affected patients. The incidence of psoriasis in Western industrialized countries ranges from 1.5 to 2%. Despite the large

information on how best to apply the treatments described (for full version, please see Nast *et al.*, JDDG, Suppl 2:S1–S126, 2006; or <http://www.psooriasis-leitlinie.de>).

**Keywords** Evidence-based guidelines ·

German

Actas Dermosifiliogr. 2013;104(8):694–709



ACTAS  
Derma-Sifiliográficas

Full English text available at  
[www.actasderm.org](http://www.actasderm.org)



CONSENSUS DOCUMENT

## Spanish Evidence-Based Guidelines on the Treatment of Psoriasis With Biologic Agents, 2013. Part 1: On Efficacy and Choice of Treatment<sup>25</sup>

L. Puig,<sup>a,\*</sup> J.M. Carrascosa,<sup>b</sup> G. Carretero,<sup>c</sup> P. de la Cueva,<sup>d</sup> R.F. Lafuente-Urrez,<sup>e</sup> I. Belinchón,<sup>f</sup> M. Sánchez-Regaña,<sup>g</sup> M. García-Bustinduy,<sup>h</sup> M. Ribera,<sup>i</sup> M. Alsina,<sup>j</sup> C. Ferrándiz,<sup>b</sup> E. Fonseca,<sup>k</sup> V. García-Patos,<sup>l</sup> E. Herrera,<sup>m</sup> J.L. López-Esteban,<sup>n</sup> S.E. Marrón,<sup>h</sup> J.C. Moreno,<sup>o</sup> J. Notario,<sup>p</sup> R. Rivera,<sup>q</sup> C. Rodríguez-Cerdeira,<sup>r</sup> A. Romero,<sup>s</sup> R. Ruiz-Villaverde,<sup>t</sup> R. Taberner,<sup>u</sup> D. Vidal,<sup>v</sup>, for the Spanish Psoriasis Group of the Spanish Academy of Dermatology and Venereology

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<sup>c</sup> Servicio de Dermatología, Hospital Universitario de Gran Canaria Dr. Negrín, Las Palmas de Gran Canaria, Spain

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<sup>f</sup> Servicio de Dermatología, Hospital General Universitario de Alicante, Alicante, Spain

Spanish

# Psoriasis in the Middle East & Africa.

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*Limited literature*

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*Egyptian Experience*

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*The Egyptian study*

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*Studies in the Middle East  
on QOL*

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*Different Cases*

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## Limited literature

Literature regarding psoriasis & its management in the geographically large, culturally diverse & heterogeneous regions of the Middle East & Africa is limited, compared with the large volume of data from the western World.

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The Journal of International Medical Research

2011; 39: 1573 – 1588

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### Management of Psoriasis in Africa and the Middle East: a Review of Current Opinion, Practice and Opportunities for Improvement

M ABDULGHANI<sup>1</sup>, A AL SHEIK<sup>2</sup>, M ALKHAWAJAH<sup>3</sup>, A AMMOURY<sup>4</sup>, F BEHRENS<sup>5</sup>, H BENCHIKHI<sup>6</sup>, I BENKAIDALI<sup>7</sup>, N DOSS<sup>8</sup>, A EL GENDY<sup>9</sup>, I MOKHTAR<sup>10</sup>, D ODENDAAL<sup>11</sup>, N RABOOBEE<sup>12</sup>, D THAÇI<sup>13</sup>, R WEISS<sup>14</sup> AND D WHITAKER<sup>15</sup>

<sup>1</sup>Department of Dermatology, King Fahad Armed Forces Hospital, Jeddah, Saudi Arabia;

<sup>2</sup>Department of Dermatology, King Fahad National Guard Hospital, Riyadh, Saudi Arabia; <sup>3</sup>Department of Dermatology, College of Medicine, King Khalid University Hospital, King Saud University, Riyadh, Saudi Arabia; <sup>4</sup>Division of Dermatology, St George Hospital University Medical Centre, Beirut, Lebanon; <sup>5</sup>Department of Rheumatology, and <sup>13</sup>Department of Dermatology, Venereology and Allergy, JW Goethe University, Frankfurt/Main, Germany; <sup>6</sup>Faculty of Medicine, Hassan II University, and Department of Dermatology and Venereology, Ibn Rochd University Hospital, Casablanca, Morocco; <sup>7</sup>Faculty of Medicine, Centre Hospitalo-Universitaire, University of Algiers, Mustapha Algiers, Algeria; <sup>8</sup>Department of Dermatology, Military Hospital of Tunis, University of Tunis El Manar, Tunis, Tunisia; <sup>9</sup>Dermatology Department, Banha University, Banha, Egypt; <sup>10</sup>Department of Dermatology, University of Tunis El Manar, Tunis, Tunisia; <sup>11</sup>Neoderm Cosmetic and Dermatology Centre, Port Elizabeth, South Africa; <sup>12</sup>Westville Hospital, Westville, Durban, KwaZulu Natal, South Africa; <sup>14</sup>Rosebank Clinic, Rosebank, Johannesburg, South Africa; <sup>15</sup>Private Practice, Kenilworth, Cape Town,

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# Studies in the Middle East & Africa on Incidence of psoriasis

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*2 small single centre studies in Saudi Arabia 2004, 2005*

---

*1.5% in South Western SA.*

---

*3.4% in Eastern SA.*

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*Shelleh et al SMJ 2004, Alakloby et al SMJ 2005*

---

*Larger study across 5 hospitals in Johannesburg SA .*

---

*9.6% in Indian patients.*

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*Hartshorne Clin Exp Derm 2003*



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## Studies in the Middle East on QOL

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*Kuwait, Iran & Tunisia.*

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*Same findings as Western countries .*

---

*Psoriasis affected physical activities and social relationships in  $\geq$  50% & sexual activity in 33% of 330 Kuwaiti outpatients as measured by the Dermatology QOL scale.*

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*Al-Mazeedi et al.2006 Int.J.Derm*



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# Egyptian Experience

- Psoriasis Clinic..**
- Department of Dermatology Ain Shams University.**
- International Psoriasis Network.**
- Registry.**
- Protocol for treatment .**

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# Objectives

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*Classification and clinical characterisation of psoriasis in Egyptian patients (phenotypes)*

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*Multicentre studies*

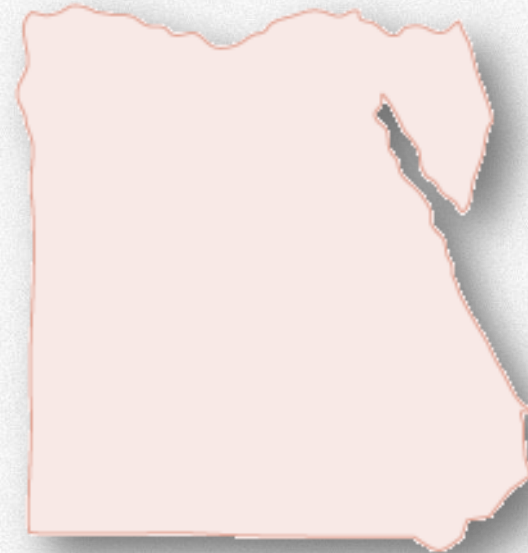
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*Protocol for treatment*

---

*Difficult cases (HCV)*

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***Egypt Fact:  
Population 85 million  
40% under poverty line***

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*Griffiths et al.(2007) BJD,Mallbris et al.(2005)JID,  
Stuart el al.(2002)Arch.Derm.Res.*



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# Psoriasis Questionnaire

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## **Evolution:**

-Continuous      -Flare-ups and complete remissions      -Flare-ups and incomplete remissions

## **Extension of the lesions during the worst episode:**

-Limited (<10% body surface area)      -moderately extensive (10-30% body surface area)      -Generalized (>30% body surface area)

## **Clinical aspect of the lesion during the worst episode:**

-Erythematous plaques      -Erythrodermic      -Pustular

## **Provoking Factors:**

-Stressful events      -Mechanical factors (Koebner phenomenon)      -Change of season  
-Infectious disease      -Weight increase      -Medication intake

## **Effect of environmental factors:**

Sun ± sea: -worsens      -improves      -clears      -no effect

---

**Treatments received:** Yes No

If Yes: -Local treatments      -Systemic treatments (Methotrexate-Cyclosporine-Acitrein-PUVA)  
-Physical treatments      -Alternative medicine

**Efficiency of treatment:** yes no

**Which was the most efficient:**

**Longest remission period:**

-<1 month      -1-3 months      -3-6 months      -6-9 months      -9-12 months      -≥1 year

**Approximate cost of treatment per month:**

**Actual Situation of Psoriasis**

**1-Patient under treatment:** Yes No

**2-Location**

-Upper extremities      -Lower extremities      -Scalp      -Face      -Genitalia      -Palms      -Soles      -Nails

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# Psoriasis

## Questionnaire

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**Clinical Type of psoriasis at presentation:** -Psoriasis vulgaris -Guttate psoriasis -Pustular psoriasis -Erythrodermic psoriasis  
-Scalp psoriasis -Nail psoriasis

**Symptoms:**

**Pruritus** Yes No

If Yes: -Limited to plaques -on unaffected skin

**Rheumatological manifestations:** Yes No

-Oligoarthritis -Polyarthritis

**Involvement of distal interphalangeal joint**

-Axial involvement (spondylitis and/or sacroiliitis) -Arthritis mutilans -Dactylitis -Enthesopathy

---

**Clinical aspect of the actual episode:**

-Nummular plaques -Large plaque -Drops -Mixed -Erythrodermic -Pustular

-Nail: Yes No

**PASI score:**

**Alteration of Quality of Life:**

-no impact -minimal side effects easily coped with -alteration of everyday life -alteration of appearance and socialization  
-major personal and social handicap

**Treatment the patient is receiving now:**

-Local -Systemic -Physical -Others

**Echo abnormalities:** yes no

**Lab. Abnormalities:** yes no

Lipid profile -Liver function test -Renal function tests -CBC,ESR,HCV,HBV

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## Study population

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*Overall 1181 questionnaires were completed at university hospitals.*

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*SPSS was performed on all patients except those presenting single episode of psoriasis (n=97 patients) and those with missing data or inaccurate history data (n=44 patients).*

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*181 subjects were excluded from the typology development.*

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*Some dermatologists reported erythroderma not only for total body area involvement but even for limited lesions. Thus erythroderma data were also excluded from the analysis*

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# Description of personal and family history among study cases

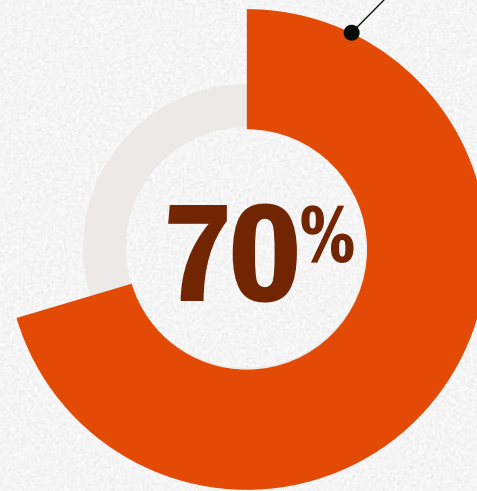
		Mean	±SD	Minimum	Maximum
Age		41.1	18.0	1.0	81.0
Gender	Male	732	70.4%		
	Female	308	29.6%		
Smoking	Yes	290	27.9%		
	No	750	72.1%		
Alcoholism	Yes	30	2.9%		
	No	1010	97.1%		
Personal antecedents of atopy	Yes	218	21.0%		
	No	822	79.0%		
Familial antecedents of psoriasis	Yes	152	14.6%		
	No	888	85.4%		
Familial antecedents of psoriasis arthritis	Yes	84	8.1%		
	No	956	91.9%		
Familial antecedents of atopy	Yes	60	5.8%		
	No	980	94.2%		



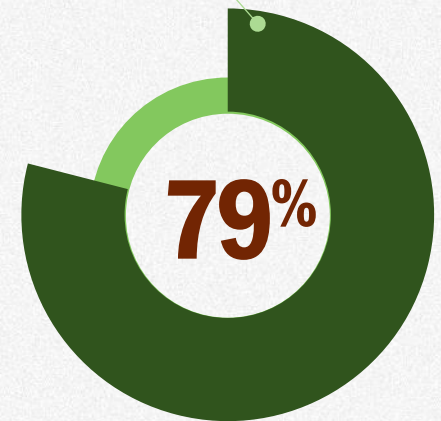
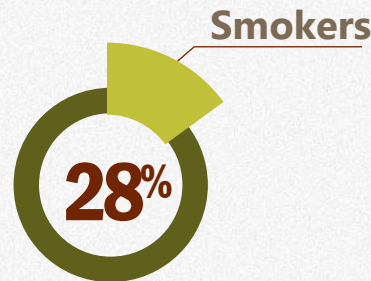
# Description of personal and family history among study cases

*Males represented the majority of cases (70.4%), smokers and alcoholics represented about 28% and 3% of cases respectively.*

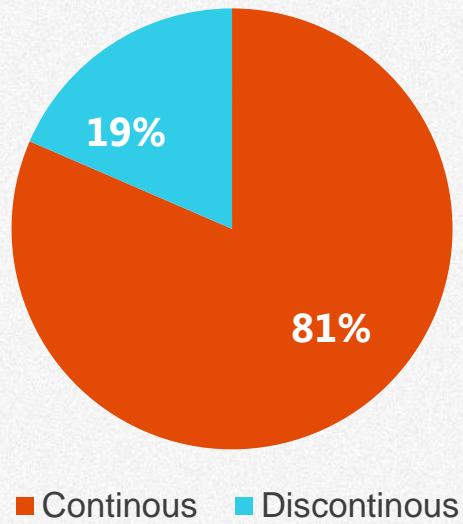
Males



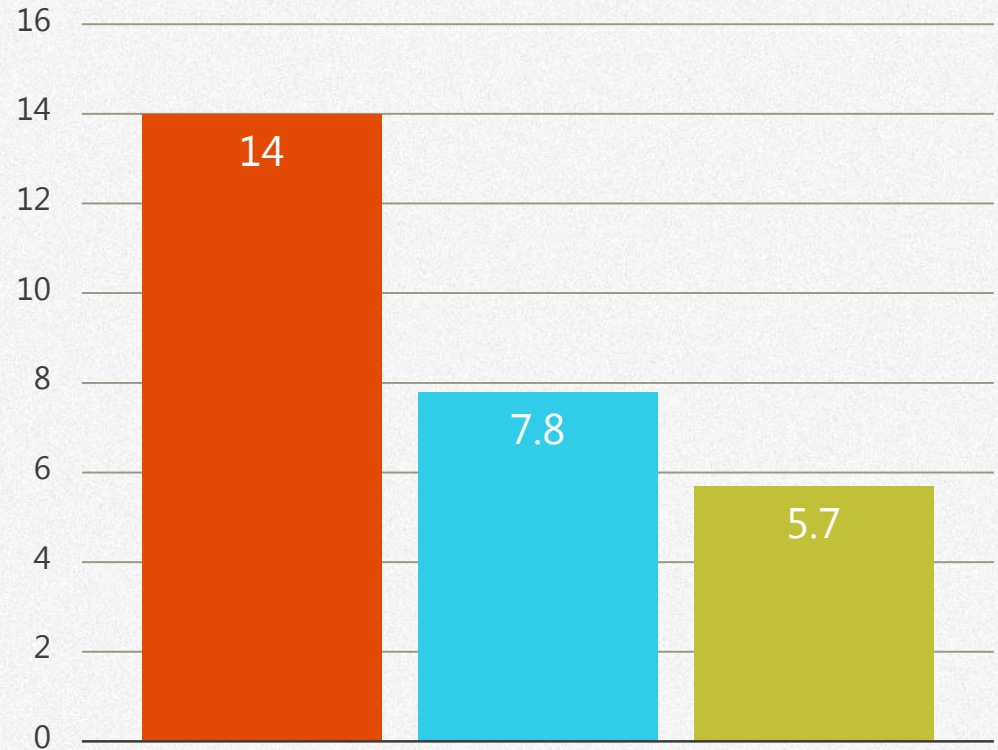
Personal History of Atopy



# History & Disease Course



**Clinical Course**

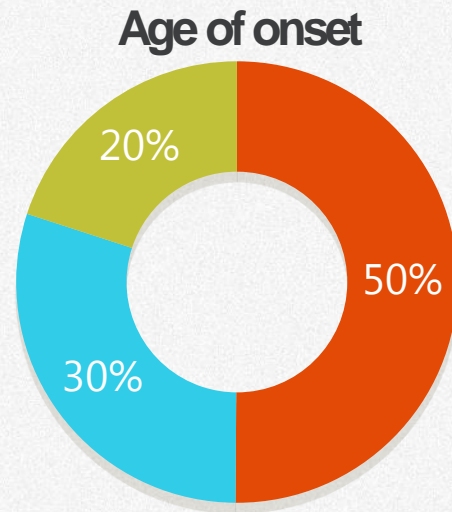


**Family History**

■ Psoriasis    ■ Psoriatic Arthritis    ■ Atopy

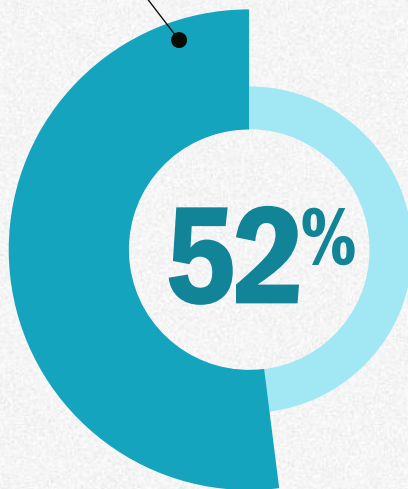
# Data

*The mean age among study cases was 41.1 ± 18 ranging between 1-81 years.*

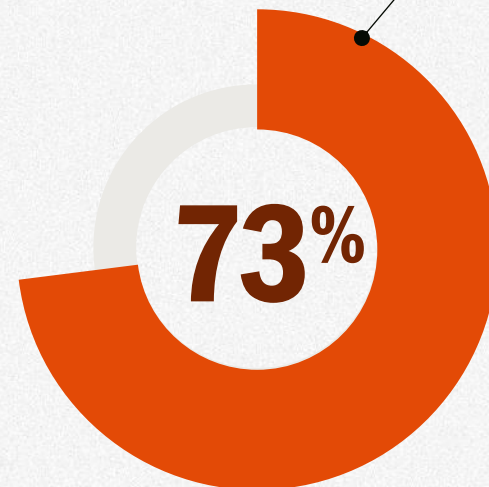


■ < 30 years ■ 30 - 49 years ■ ≥ 50 years

## Pruritus



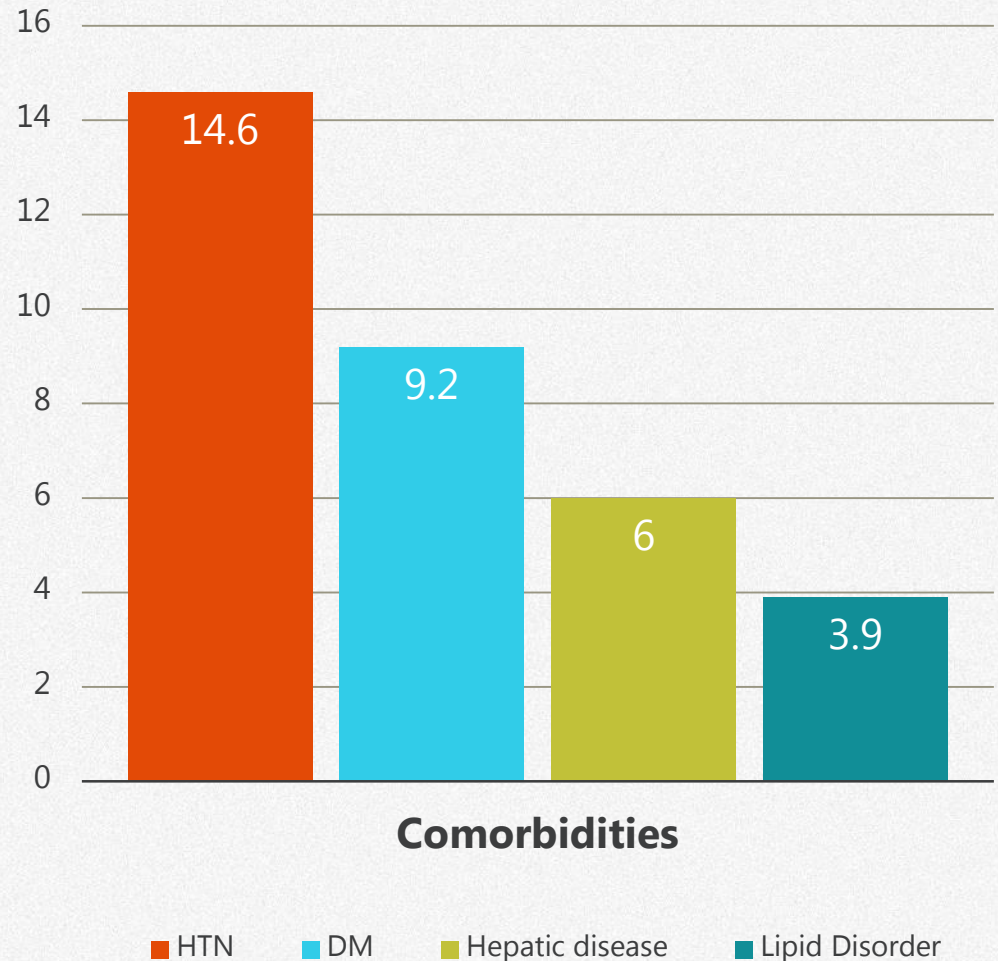
## Psoriatic Arthritis



# Description of medical characteristics (comorbidities) among study cases

The table showed that HTN was the commonest co morbidity among cases (14.6%) while lipid disorder was the least frequent among cases (4%)

		N	%
Lipid disorder	Yes	42	4.0%
	No	998	96.0%
High blood pressure	Yes	152	14.6%
	No	888	85.4%
Diabetes	Yes	96	9.2%
	No	944	90.8%
Hepatic disease	Yes	62	6.0%
	No	978	94.0%



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# Different Cases



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# Different Cases



# Different Cases



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# Different Cases





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# Different Cases



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# Different Cases



# Management of psoriasis with limited resources

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# Where do we stand

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*Weekly clinic*

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*Follow up of patients*

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*No Governmental funding*

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*Non governmental funding*  
*Charities, Pharmaceutical industry, NGOs*

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*Generic treatment*

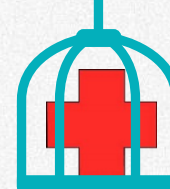
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*Phototherapy*

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*Difficulty in obtaining newer drugs*

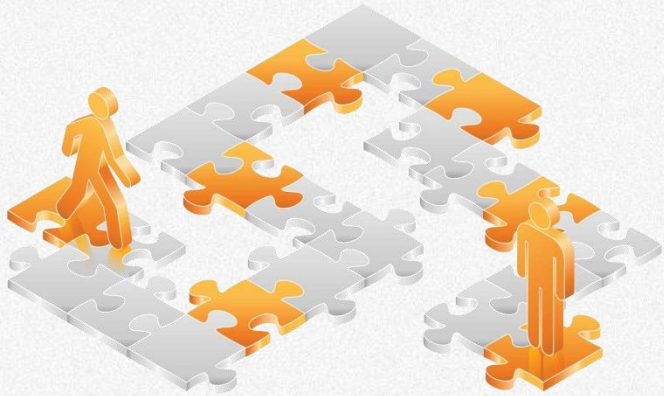
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# Challenges & gaps

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## Challenges and gaps



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*Severe social & economic burden of the disease.*

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*Co-morbidities.*

---

*Unmet needs facing the dermatologists with limited resources.*

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*Lack of resources .*

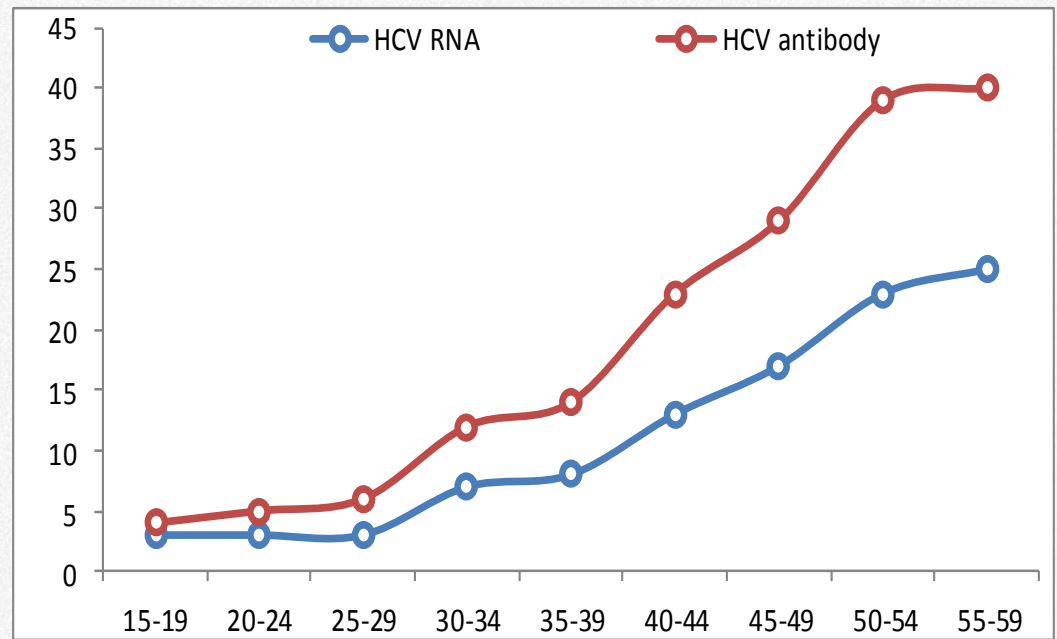
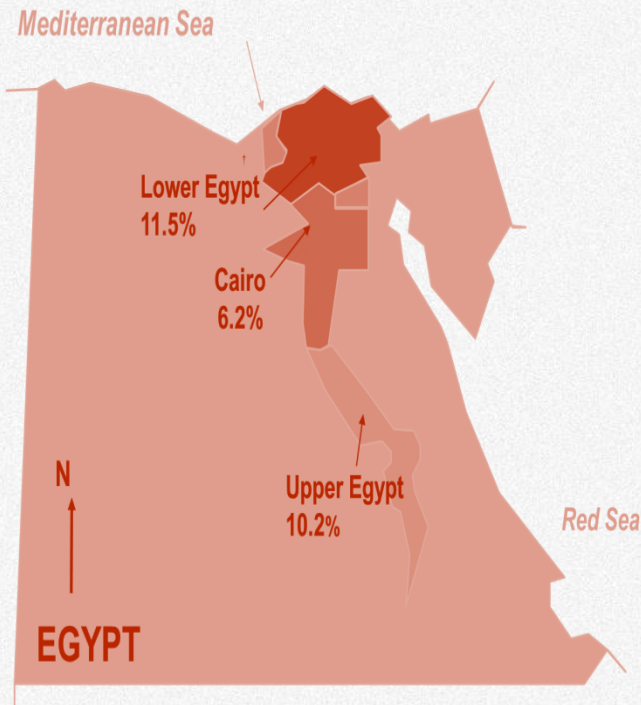
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*HCV.*

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*Ministry of Health budgets.*

# HCV in Egypt 2008



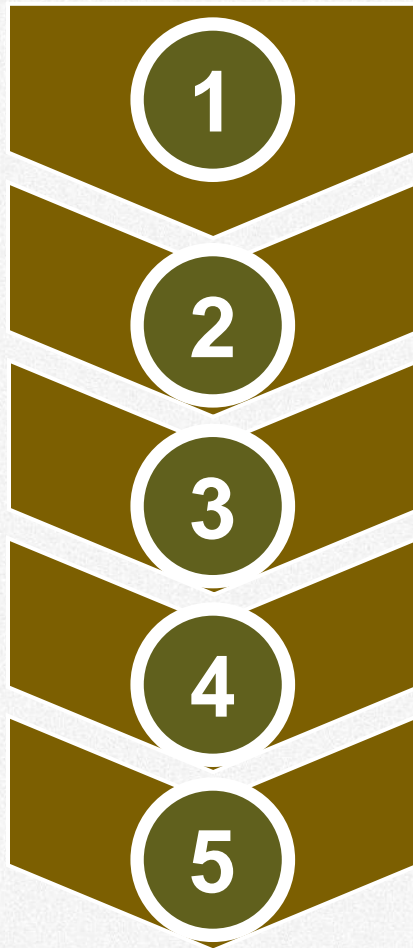
DHS survey 2008, in collaboration with NCCVH 2008 Egypt Demographic Health Survey Results

**Suggestion of a  
national  
strategy**



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# Suggestion of a national Strategy



- **National Strategy including all health care sectors in Egypt.**

- **National registry.**

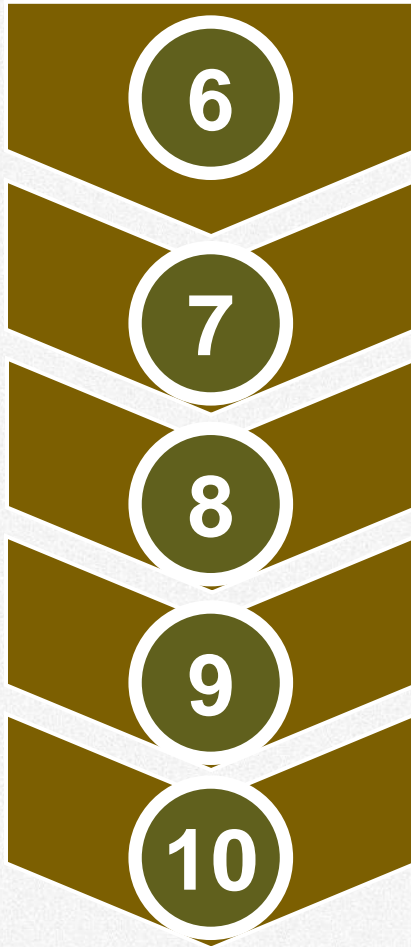
- **Larger epidemiological studies to know the true size & impact of the problem.**

- **Awareness program to all health care providers & primary health physicians.**

- **Specialized referral centres.**

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# Suggestion of a national Strategy



▪ **Patients advocacy groups.**

▪ **Fill the research gaps.**

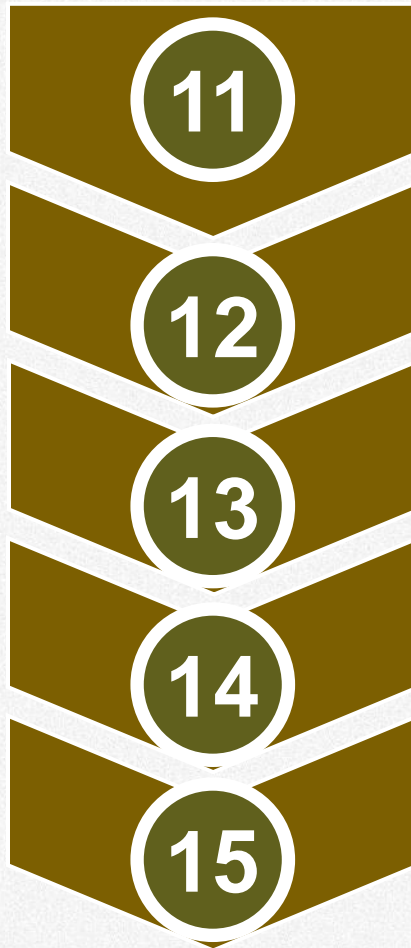
▪ **Management of Co-morbidities.**

▪ **Research and clinical trials in special population groups.**

▪ **Guidelines & treatment protocols implementing changes to current management practice.**

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# Suggestion of a national Strategy



- **Collaboration with international experts**

- **Modelling studies for cost-effective treatment .**

- **Media Campaigns.**

- **Long term research data so governments recognize psoriasis as a disabling disease needing early diagnosis & treatment .**

- **Involve stake holders for support.**

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# Conclusion

**“Early management of psoriasis is more cost effective to avoid long term morbidity & complications.”**

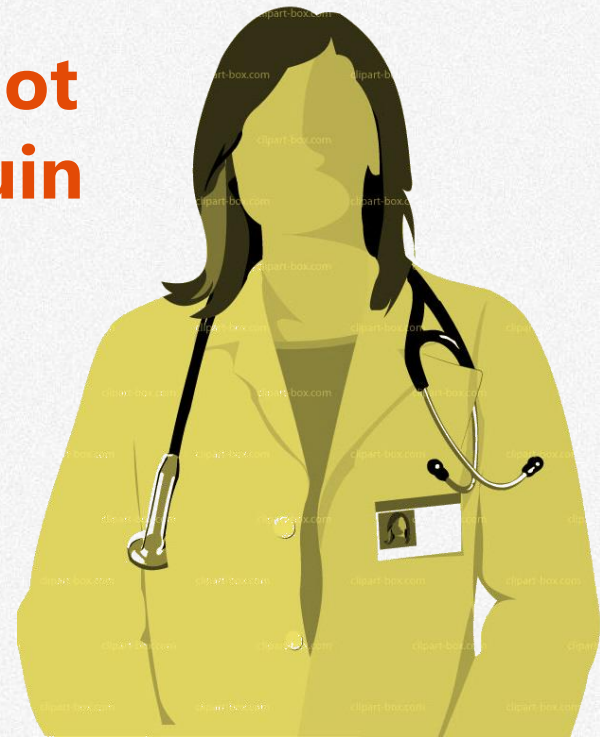


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# Conclusion

**“Psoriasis is at once both a common and complex disease.**

**Psoriasis usually does not take lives, but it does ruin them.**



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# Thank you

## **contact information**

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