# PIGMENTARY DISORDERS, PREVALENCE, IMPACT ON QUALITY OF LIFE, SOCIAL STIGMATIZATION:

#### RESULTS OF THE FIRST LARGE INTERNATIONAL SURVEY

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## INTRODUCTION & OBJECTIVES

Pigmentary disorders (PD) such as Melasma, Post-inflammatory Hyperpigmentation (PIH), Solar Lentigo, Vitiligo, Peri-Orbital Hyperpigmentation (POH) and Axillary Hyperpigmentation (AH) are frequent dermatological conditions, but little is known on their real-world prevalence and impact. This first worldwide survey evaluates the prevalence of PD and its impact on quality of life (QOL) and stigmatization.

#### MATERIAL & METHODS

Survey (N= 48,000) conducted in 34 countries from all continents from December 2022-February 2023. An automated selection from the Ipsos Panel ensured representative samples (gender, age, employment status and country region) based on quota method.

The online auto-administered questionnaire covered demographics, phototype, self-reported pigmentation condition based on a descriptive text and image; its management and impact on QOL, stigmatization, and sun protection behavior.

#### RESULTS

50% of the population report having at least one pigmentation disorder such as solar lentigo 27%, AH 18%, PIH 15%, POH 15%, melasma 11% and vitiligo 8% (Fig.1), with an average age of 44yo and affecting more women (59%). Previous dermatological diagnosis was reported in a third (36%) of the population, and 19% made their own diagnosis thanks to the questionnaire (Fig.2).

All pigmentation disorders significantly impact QOL and lead to stigmatization. DLQI was >10/30 for 28% of them, from 15% for solar lentigo to 47% for vitiligo (Fig. 3). Stigmatization is important in all conditions: 45% of patients with a PD have concealed/hidden the visible parts of their affected skin and 30% have avoided some people (Fig. 3.).

Although sun exposure is well recognized by the medical community to worsen the pigmentation, respondents reported a low-level protection against the sun: only 38% protect their skin all year (Fig. 4), and only 38% consider that sun exposure is deleterious to their condition. Only 42% select their sunscreen more cautiously, about UVB protection and 37% for UVA. 25% of people without PD do not take care of any particular mention before choosing their sunscreen. Among sunscreen users, 13% of sufferers use an SPF < 30 and 18% among those without PD.

And yet, 80% of sufferers and 70% of those without PD regret not having better protected their skin from the sun in the past.

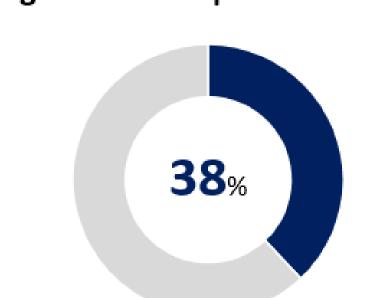
Figure 3: Dermatology Life Quality Index AND Stigmatization per Pigmentation Disorder (%) DLQI AΗ Melasma PIH POH lentigo No effect or small effect on patient's life (=0to5) 46 42 72 35 50 45 Moderate effect on patient's life (=6to10) 23 13 18 20 22 20 Very or extremely large effect on patient's life 34 15 35 47 30 33 (=11to30)STIGMATIZATION Over the last 4 weeks, because of the way others look at you, did you feel that it was better to... (% at least sometimes) ...conceal/hide the visible parts of your affected skin 30 48 55 51 57 33 32 ...refuse direct contact with the public 17 ...that you have been left out 23 by your colleagues at work ...that you were pushed away 22 24 by your partner ...that you brought shame to 23 23 23 your family, your relatives Figures significantly lower / higher (P<.05) compared to the whole population who reported PD (All PD)

Figure 1: Proportion of population who report Pigmentation Disorders

27%	18%	15%	15%	11%	8%	
SOLAR LENTIGO	AH	PIH	РОН	MELASMA	VITILIGO	

How was the diagnosis made for your pigmentation disorder?		Melasma	PIH	Solar Ientigo	Vitiligo	РОН	АН
By a Dermatologist	36	41	38	33	49	34	34
By your own before the survey	20	19	20	23	10	22	21
Reading the descriptions filling this questionnaire	19	13	16	23	4	24	20

#### Figure 4: Photoprotection behaviours



#### protect their skin with at least one measure all year long even when overcast or in winter

- ✓ Avoid direct sun exposure when sunny days
- ✓ Avoid sun exposure when sunny days and overcast days
- ✓ Seeking the shade
- √ Wear clothes or hats
- ✓ Use sunscreens

Please precise how often you are protecting your skin from sun exposure	All PD	Melasma	PIH	Solar lentigo	Vitiligo	РОН	АН
% at least one measure all year long	38	47	40	33	44	37	39
Which way(s) do you protect your skin from sun exposure?							
Use <u>sunscreens</u>	43	49	39	52	29	39	38
Avoid direct sun exposure when sunny days	44	42	46	43	49	44	44
Wear <u>clothes</u> or <u>hats</u>	33	30	34	36	28	31	31
Seeking the shade	30	31	29	33	33	28	28
Avoid sun exposure when sunny days and overcast days	23	27	26	19	32	23	24
Do not protect themselves from the sun	21	18	24	20	18	22	23

Figures significantly lower / higher (P<.05) compared to the whole population who reported PD (All PD)

### DISCUSSION

This first large international survey on Pigmentation disorders shows the high prevalence of pigmentation disorders worldwide, their significant impact on QOL and stigmatization, highlighting the need for photoprotection education.

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