

Cycle irregularity, perimenopause and post-partum can influence self-perception of skin disorders and impact wellbeing: results of a worldwide epidemiological study

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1 INTRODUCTION AND OBJECTIVES

Skin physiological characteristics and skin disorders are considered to be directly influenced by menstruation.^{1, 2}

Physiological changes are associated with the menstrual cycle and hormone fluctuations play an important role in regulating skin physiological parameters during it.³

Several skin characteristics, including skin surface lipids and sebum production, skin thickness, skin hydration, barrier function, dermal collagen content, skin pigmentation, UV susceptibility and resident skin microbiota can vary with the cyclically fluctuating levels of oestrogens and progesterone.¹

The impact of the hormonal status on skin disorders of women has - until now - been poorly studied.

2 OBJECTIVES

To provide insights into self-perceived skin disorders in women at various stages of their hormonal life and across their menstrual cycle.

3 MATERIAL & METHODS

- Online interviews have been conducted in a representative panel of women using the quota method applied to age, occupation, and region, from January to February 2023.
- 20001 interviews in women have been conducted in 20 countries from 5 continents among representative samples of women aged from 18 to 55 years (Figure 1).
- Participants were classified into the following subgroups: menopausal (n=1463), perimenopausal (n=3918), post-partum that gave birth less than two years ago (n=1978) and active ovulation (n=13571), including regular (59%) and irregular (41%) cycles.
- Women had to provide 12 answers about perceived skin disorders (changes in pore dilation, skin shininess, skin pallor, skin elasticity, skin tone, skin thickness, pigmentation spots or patches, wrinkles, redness, dark circles, flakiness), skin dryness and sensitivity, wellbeing, and their variations across the menstrual cycle when relevant.

4 RESULTS

Preliminary results from this survey show that:

- 91% of women experienced at least one skin disorder.
- 61% of women with active ovulation complained that skin disorders were present or worsened at a certain time point of the cycle, mainly before or during menstruation (76%; Figure 2).
- Three out of four skin disorders were present or did worsen throughout menses including pale skin, dark circles under the eyes and dull skin tone being the three skin disorders most reported at this moment of the cycle (50%, 49% and 49%, respectively; Figure 3).
- During the peri-ovulation period self-perceived skin disorders seemed to be reduced (Figure 4).
- Among perimenopausal and among post-partum women, skin disorders were significantly overrepresented (96% and 93%, respectively with at least one skin disorder).
- The 3 most common skin disorders were dark circles, pore dilation and dull/pale skin tone (67%, 57% and 56% respectively).
- 72% of the women considered that hormonal variations negatively impacted their wellbeing. This incidence reached 82% in the perimenopausal group and 79% in the post-partum group.

FIGURE 1: Participating countries and percentage of participants



FIGURE 2: Nature of the skin in each life stage

	ALL WOMEN	ACTIVE PERIODS	REGULAR PERIODS	IRREGULAR PERIODS	PERI-MENO PAUSAL	RECENT MENO PAUSAL	POST PARTUM	NO CHILDREN
DISCOMFORT WITHOUT VISIBLE PERMANENT DRYNESS (PEELING)	9	9	8	12	10	6	11	7
FEELING OF DRYNESS WITH TIGHTNESS	18	16	14	19	25	19	21	13
NORMAL (SMOOTH TO THE TOUCH WITHOUT EXCESS OILINESS OR DRYNESS)	34	34	36	30	30	42	32	33
MIXED (GREASY NOSE AND FEELING OF DRIER SKIN ON THE FOREHEAD)	20	20	22	19	20	22	18	24
GREASY (DILATED PORES AND SHINY APPEARANCE)	19	21	20	20	15	11	18	23

FIGURE 3: Skin disorder perception along the cycle

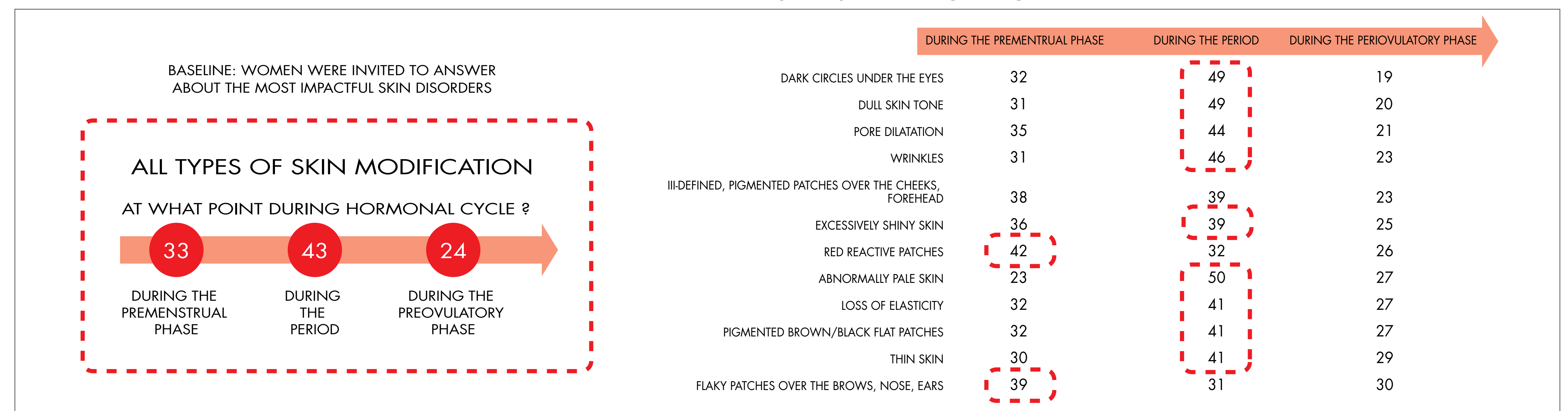
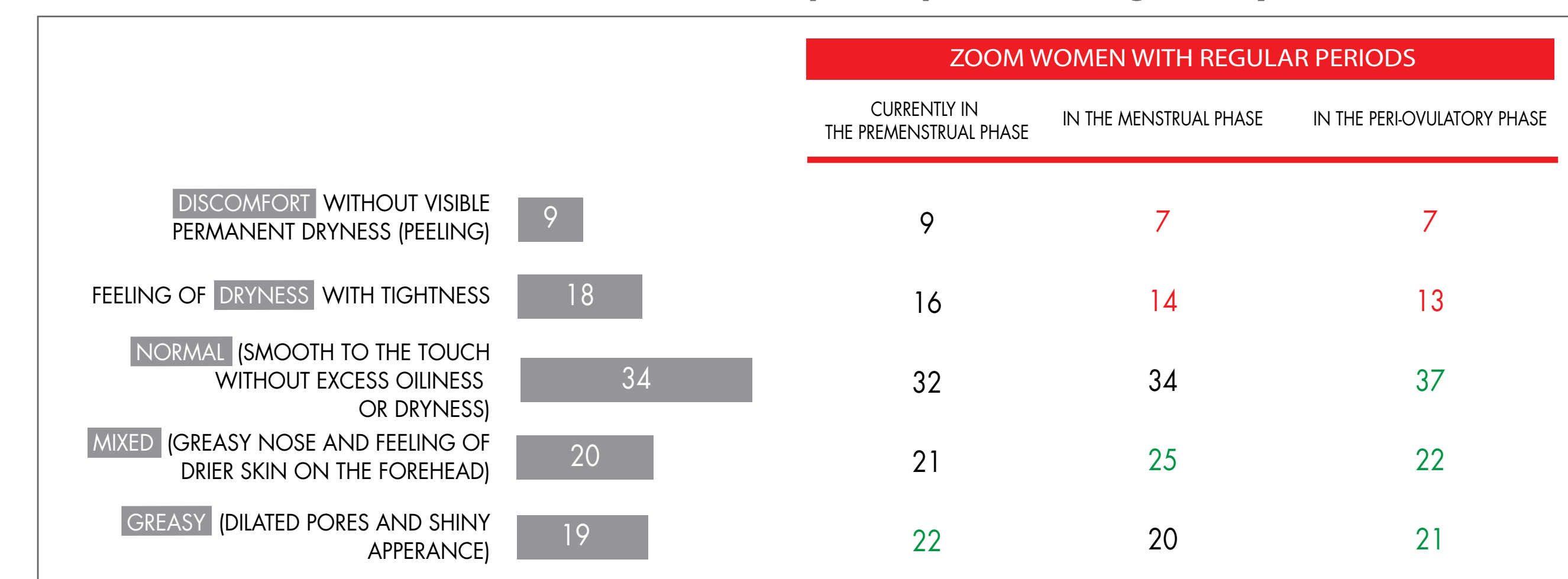


FIGURE 4: Skin disorder perception along the cycle



5 CONCLUSION

Preliminary results from this survey show that:

- Women with regular cycles experience a better facial skin quality than women with irregular cycles.
- Regarding the cycle, the most impactful skin disorders occur during the period (dull/pale skin) followed by the secretory phase (inflammatory/seborrheic skin).
- Women mostly feel hormonal variations at the premenstrual cycle phase.
- Well-being is strongly associated with normal periods.