

Significant impact on skin disorders and well-being through hormonal variations during perimenopause and premenstrual/menstrual cycle phases

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1 INTRODUCTION

Research has confirmed that physiological changes are associated with the menstrual cycle, and hormone fluctuations play important roles in regulating skin physiological parameters during the menstrual cycle.¹⁻³

Several characteristics of the epidermis, including skin surface lipid secretion 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

Currently, the impact of the hormonal status on skin disorders of women has only been poorly studied.

2 OBJECTIVES

To assess worldwide self-perceived skin disorders in women at various stages of their hormonal life and the variations of the reported skin disorders across the menstrual cycle.

3 MATERIALS & METHODS

- 20 000 women among representative samples of women aged from 18 to 55 years from 20 countries worldwide were interviewed online from January to February 2023.
- The quota method was applied for gender, age, activity and region.
- A preliminary analysis of data from 9901 women from 9 countries in Europe and North America was performed (Figure 1).
- Women were classified into mutually exclusive subgroups: with regular or irregular cycles (N= 6426), post-partum (N= 23) perimenopausal (N= 1898), and menopausal (N=1463) and were questioned about 12 skin disorders.
- Each subgroup was questioned about variations of the reported skin disorders during the menstrual cycle.

4 RESULTS

- 90% of the participating women reported at least one skin disorder; 82% experienced more than one skin disorder with a mean number of 4.7±3.2. Detailed results are given in Figure 2.
- 69% did not use any hormonal treatment and 43% used at least one dermocosmetic.
- All skin disorders were overrepresented in perimenopausal women (94%).
- 24% identified skin disorders occurred most frequently during pre-menstruation or during menstruation; 73% reported that skin disorders remained stable during the cycle (Figure 3).
- 55% reported continues skin disorders, which were the most frequently reported (63%) by peri-menopausal women with regular or irregular cycles.
- During menstruation, an increased percentage of women reported abnormally pale skin (50% vs 23% during the perimenstrual phase (PMP)), dark circles under the eyes (49% vs 32% during PMP), dull skin tone (49% vs 31% during PMP), dilated pores (44% vs 35% during PMP) or skin shininess (39% vs 36% during PMP).
- In women with regular or irregular menstruation, pore dilatation (67%) and skin shininess (55%), abnormally pale skin (60%), loss of elasticity (71%), dull skin tone (52%), pigmented, brown/black flat patches (66%), thin skin (60%), ill-defined, pigmented patches over the cheeks and forehead (56%) and wrinkles (80%) were overrepresented.
- In 69%, hormonal variations negatively impacted their well-being; in the in the perimenopausal group this percentage reached 79%.

FIGURE 1: Participating countries and % of participants

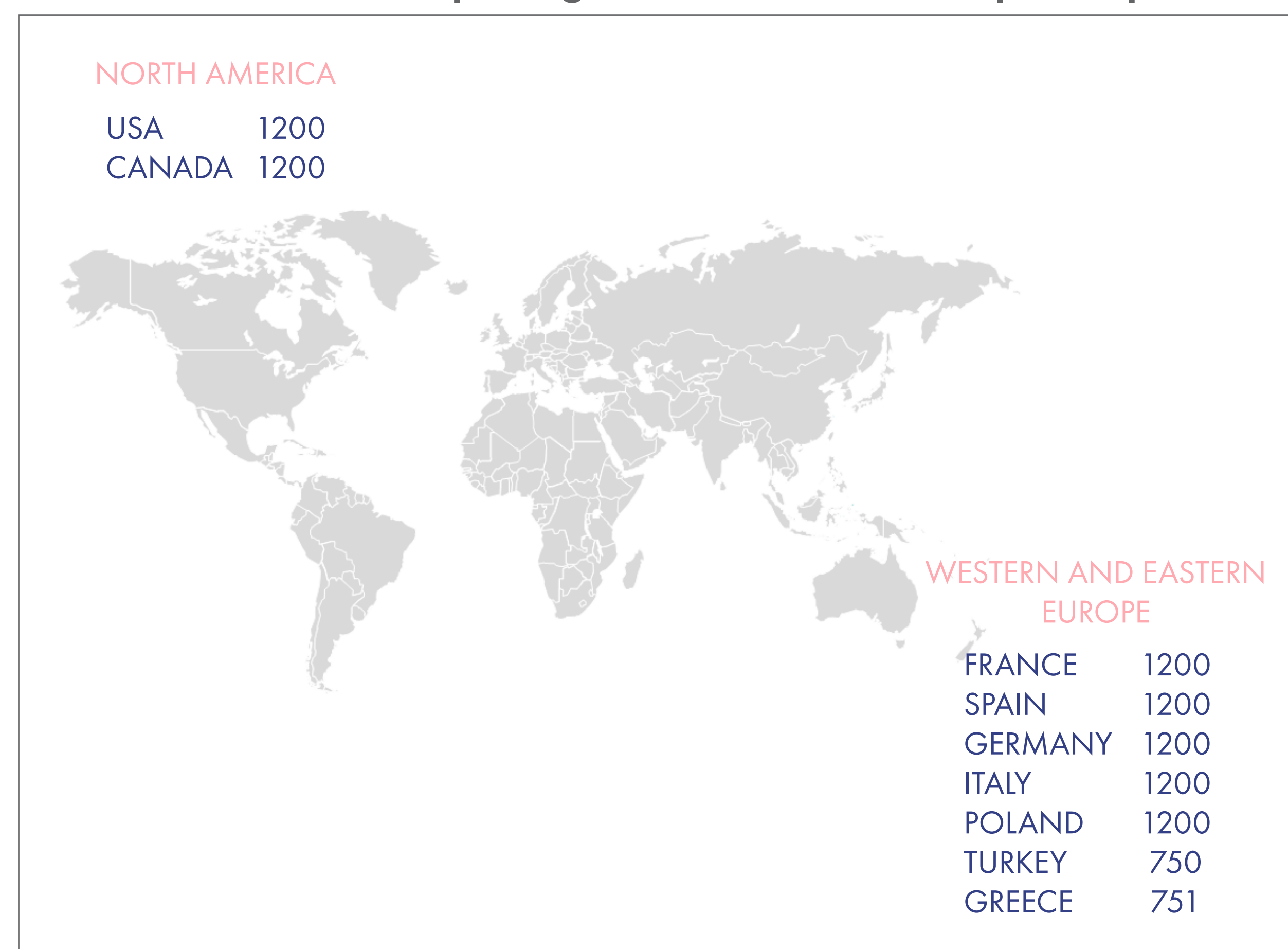


FIGURE 2: Overall reported incidence (%) of skin disorders

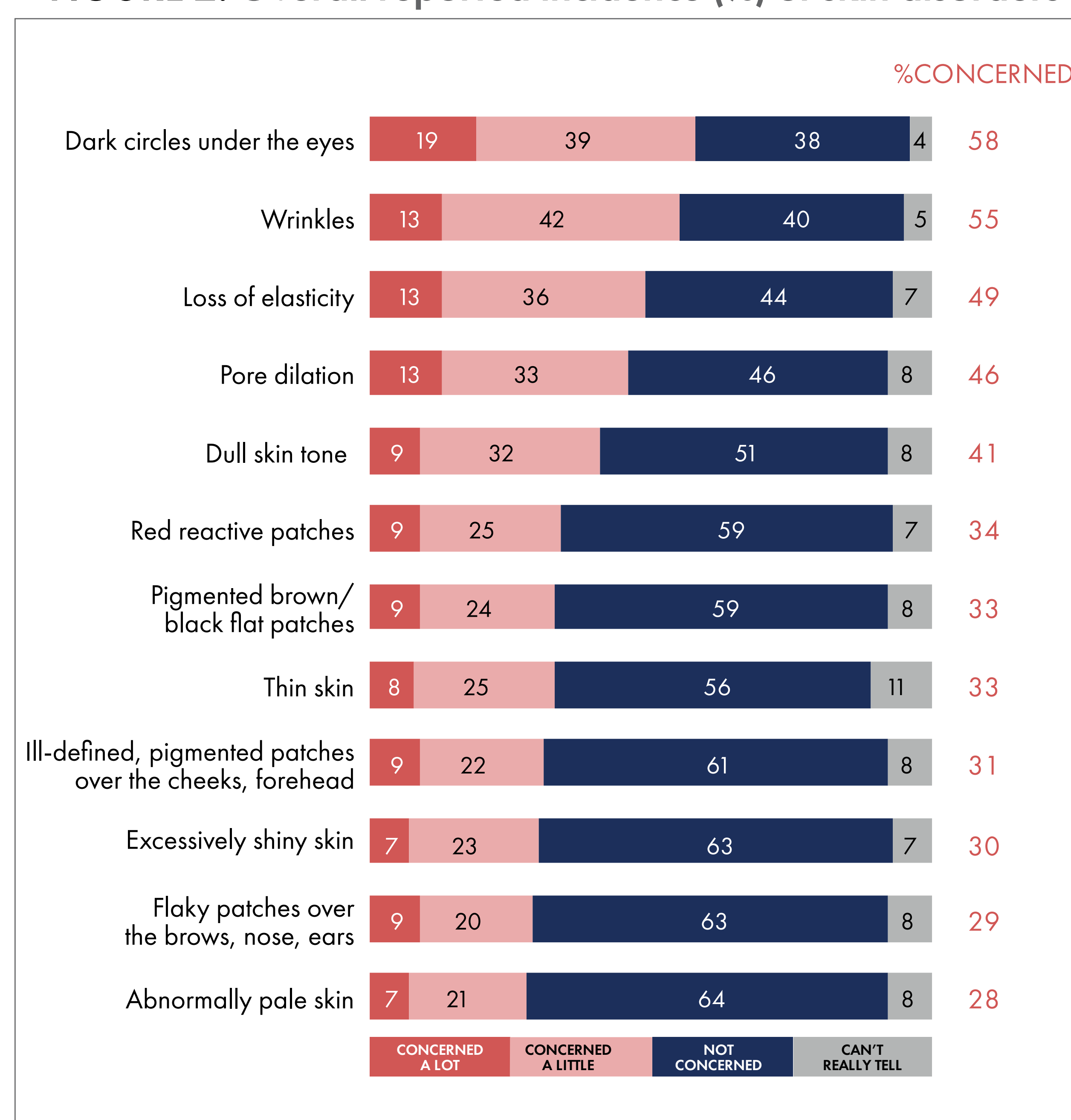
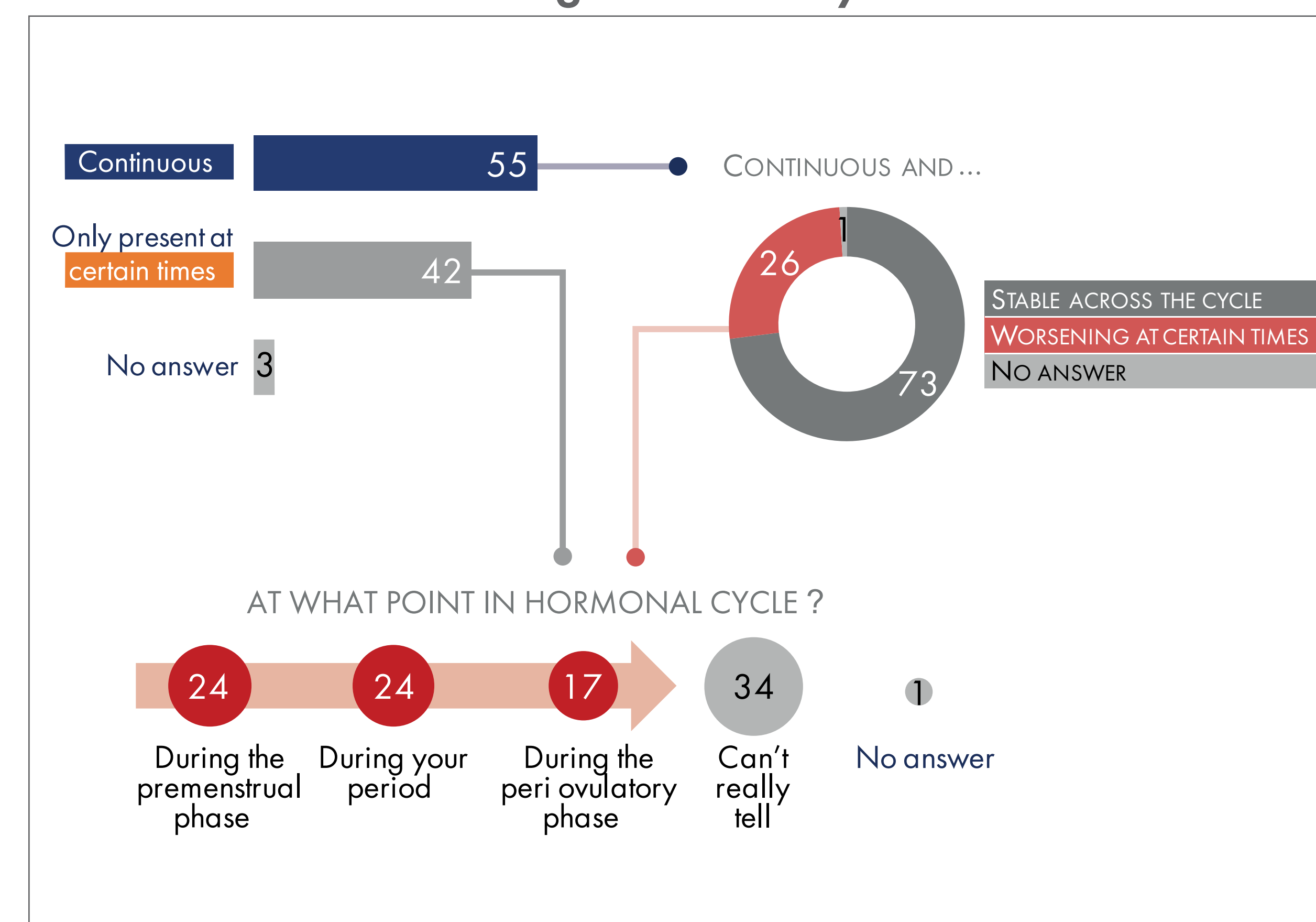


FIGURE 3: Presence of skin disorders according to time point during hormonal cycle



5 CONCLUSION

This survey confirms that hormonal variations across the different stages of the women's hormonal life severely impact skin disorders. These disorders increase during perimenopause and premenstrual or menstrual phases of the cycle with an alteration of the subject's well-being.