

Study The Role Of Moisturizers In Women Over 30 Years Of Age

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Abstract:

Hormones play a very important role in women's day to day life. One of the very first organs that starts showing effects due to the changes in the hormonal levels is skin. Women experience these changes during the period when their bodies are in the process of making a natural transition towards menopause is known as "Perimenopause". Women start perimenopause at different ages and some notice changes as early as their mid-30s.

As far as the skin is concerned, it is possible that lower estrogen levels may be directly associated with the degree of the thinning that occurs with age. Lower estrogen levels can lead to loss of skin moisture, skin elasticity and disturbance in skin barrier function. Dry skin complaints are common as women age and these can easily be treated with small changes in personal lifestyle habits. Dry skin, when not taken care of, may lead to skin diseases like atopic dermatitis and eczema. Studies have also established that Acne vulgaris is found to be prevalent not only in oily skin but also in dry and very dry skin. Dry skin if goes untreated, it can develop into abnormalities and eventually progress into skin diseases.

In this study, of all women who responded to our questionnaire, 50% of women mentioned that their skin was drier than earlier. Total 40% of women were found to be suffering from dry skin conditions, 38% were having pigmentation, 20% had wrinkles and fine lines and 18% were suffering from acne or pimples.

Majority of women (55.6%) responded saying that the use of moisturizers showed improvement in their skin conditions.

Thus, women should be made aware of the importance of including a moisturizer in their skincare routine and that they should start working on it as early as in their mid-30s.

Keywords: Woman, Dry skin, moisturizer, Skincare

Introduction:

Life of women is not easy owing to the complex hormonal design. Hormones play a very important role in women's day to day life both at psychological as well as physiological levels. One of the very first organs that starts showing effects due to the changes in the hormonal levels is skin. Skin is the largest sensory organ of the human body and is one of the first organs exposed to the foreign material and the skin barrier is the first line of defense of the human body against harmful microbes. The maintenance of skin function and appearance is important and plays an influential role in the quality of life for women.

Most of the women enter menopause somewhere between the ages of 40 and 58 years. But some symptoms like changes in the skin can start even before entering menopause. The period when the body is in the process of making a natural transition towards menopause is known as "Perimenopause".

Perimenopause is “around menopause” and can also be referred to as menopausal transition, with menopause marking the end of the reproductive years. Women start perimenopause at different ages and some notice changes as early as their mid-30s.

During the perimenopausal phase, the production of estrogen slowly begins to decline. In addition to its function in reproduction, estrogen plays an important role in maintaining the skin elasticity and skin texture. Estrogen stimulates the formation of skin-smoothing collagen and oils. And therefore, as menopause approaches and estrogen production starts to decline, the dry and/or itchy skin becomes very common. This slow decline in estrogen levels, and the changing ratios of hormones in a woman’s body, do not just slow down the body's oil production, but they also reduce the skin's ability to retain moisture.

Skin moisturization plays a vital role in keeping the skin barrier intact and therefore keeping the skin healthy by maintaining the optimal water content of the skin.

Literature Review:

The maintenance of skin function and appearance is important and plays a prominent role in the quality of life for women. As far as the skin is concerned, it is possible that lower estrogen levels may be directly associated with the degree of the thinning that occurs with age. There are estrogen receptors in the skin and there is a much higher density of these receptors in facial skin than elsewhere on the body (1) Studies confirmed that estrogen receptor beta is the main mediator of estrogen action in human skin and the hair follicle (2). Studies showed that estrogen maintained skin moisture by increasing acid mucopolysaccharides and hyaluronic acid in the skin and possibly also maintained stratum corneum barrier function. Skin wrinkling may also be benefitted from estrogen as it showed effects the elastic fibers and collagen (3). Dry skin complaints are common as women age and these can easily be treated with small changes in personal lifestyle habits (4). Dry skin, when not taken care of, may lead to skin diseases like atopic dermatitis and eczema (5). Studies have also established that Acne vulgaris is found to be prevalent not only in oily skin but also in dry and very dry skin (6). Dry skin if goes untreated, it can develop into abnormalities and eventually progress into skin diseases. Extremely dry skin refers to any skin condition that exceeds its normal dry state. Dryness is often associated with the observed impaired barrier function in atopic skin, psoriasis, ichthyosis, and contact dermatitis (7). Dermatitis and eczema are the frequently used terms to describe a polymorphic pattern of inflamed skin caused by dryness. Atopic dermatitis, psoriasis and ichthyosis can be considered as the acute phases of dryness while xerosis and contact dermatitis can be considered as the chronic stages associated with skin dryness (8). It is believed that the skin requires moisturization only during winters. But the regions where summers are harsh and mostly dry, the soaring sunlight absorbs the moisture from the skin leaving it dry and flaky. It is also found that skin moisture levels are lower at higher temperatures and the feelings of dryness on bare skin are high in low humidity (9). Stratum corneum, the outermost layer of the skin provides a barrier to loss of water from the skin. This barrier permits retention of water in the skin preventing the formation of cracks. Disturbance of the skin barrier is central to all dry skin conditions and cracks once developed can allow easy penetration of irritants and allergens (10)

Fortunately, treating dry skin and combating other dry skin related problems is much easier than thought.

Moisturizers are employed to repair the skin barrier, to reduce transepidermal water loss leading to aesthetic improvement of dry skin. Skin moisturization is one of the basic steps in the skincare routine. Moisturizers help in maintaining 10-30% water content of the skin and play a critical role in daily maintenance of healthy skin by replacing the natural skin oils, covering tiny fissures and providing a protective film on the skin. Moisturizers help to decrease the evaporation of the skin’s moisture, maintain hydration and improve the appearance of the tactile properties of the skin (11).

Keywords: Moisturizers, perimenopause, menopause, women, dry skin, skin barrier

Research design:

Objectives:

The objective of this study was to find whether skin changes are profound in women after their 30s and if they are mostly related to dry skin conditions. The study also aimed at finding out if the inclusion of moisturizers in the skincare routine of women, helps in combating these dry skin conditions and therefore reduces the chances of further progression of these conditions into other dry skin related disorders.

Methods:

A questionnaire containing a set of multiple-choice questions related to skin conditions, the use of different types of moisturizers as well as their effects, was given to 70 women aged 30 years and above. Total 50 responses were received. Out of the 50 responses received, more than 50% of women were of age 35 years and above.

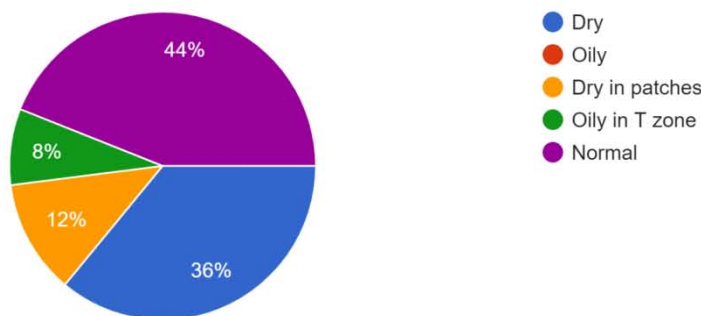
Based on the 50 responses we received, the collected data was converted into Pie charts and bar graphs. The final conclusion was made based on the percentage of women adhering to a certain response with respect to a specific question.

Findings and Analysis:

The Skin type test

A simple method was explained to women to find their current skin type. Women were asked to wash their skin, especially facial skin with a gentle cleanser. Skin type options were given and women chose the most appropriate one based on how they felt about their skin after washing and gently dabbing with a soft towel.

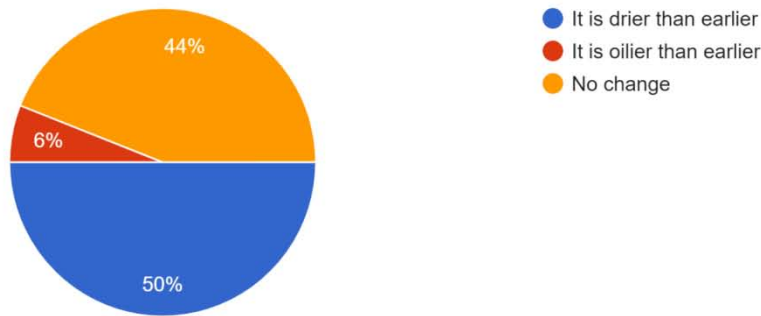
Based on the collected responses, 44% women found their skin to be normal. But 36% of women found it to be dry and 12% of them found it to be dry in patches. Of this 8% women found their skin oily even after washing with a cleanser. From this data, overall 48% of women found their skin to be dry after washing with a gentle cleanser.



Changes in the skin type

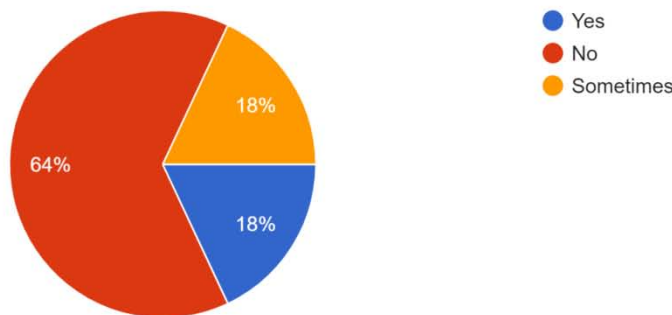
As per the objective of this study, the women were asked if they are experiencing any changes in their skin types - whether the skin is becoming drier than earlier or whether it is becoming oilier than before.

Based on the collected data, 50% of women selected the option "It is drier than earlier" confirming the objective of this study that as women age, their skin lacks the ability to retain moisture leading to drier skin. Of these, 44% of women did not find any changes in their skin condition and selected the option as "No change" and a very small percentage (6%) of women, quoted their skins to be oilier than before.



Menstrual irregularity

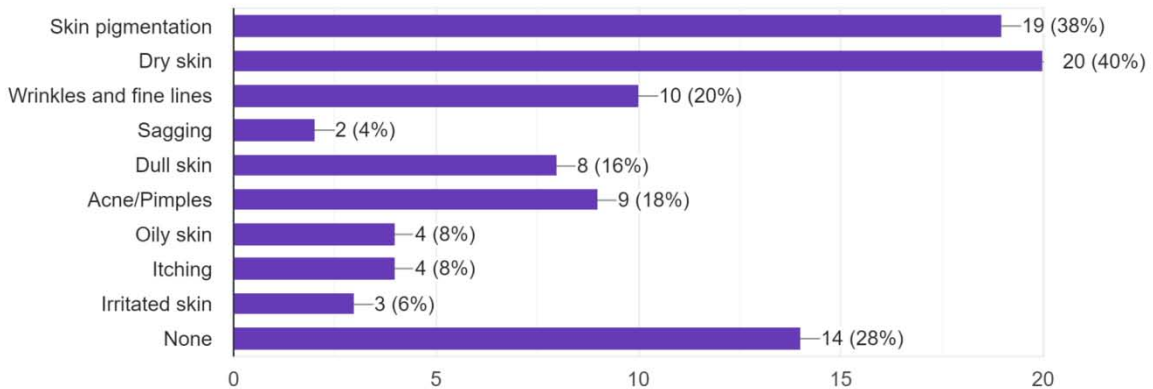
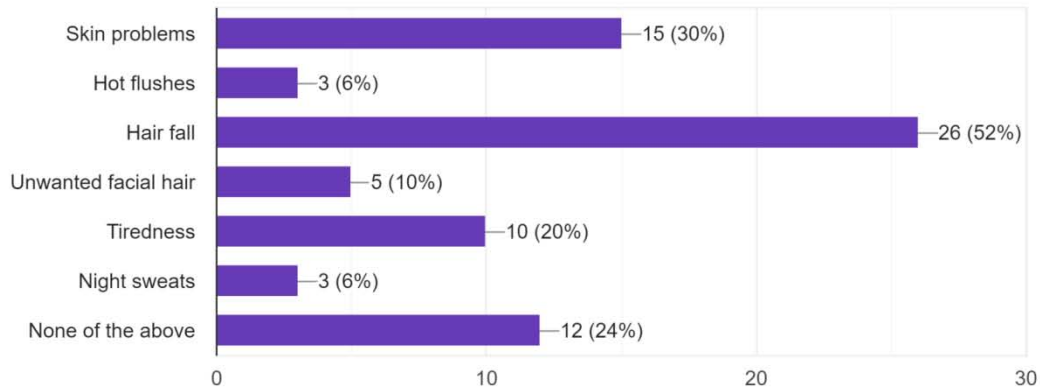
Most of the women in this study group were aged between 35 to 50 years, meaning that they were not menopausal but perimenopausal. The irregularity in periods is very rarely found in the perimenopausal age group but the changes in skin conditions being one of the first few symptoms which mark the perimenopausal phase, only 18% of women claimed to be facing irregularities in their menstrual cycle. 64% of women did not face any menstrual irregularities whereas 18% of women faced the menstrual irregularities occasionally.



Skin and other conditions

The women of this study group were asked to select skin related and other conditions they were going through. As per the literature review, it was found that dry skin if not treated on time can also lead to certain other conditions like acne and eczema, the responses to this specific question adhered to the objective that women go through the skin related changes and other conditions during the perimenopausal phase.

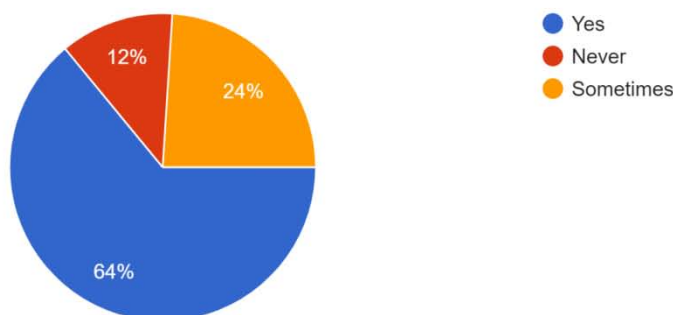
Based on the collected data, 52% of women had hair problems and 30% of women were having skin related conditions. When asked about a specific skin problem, 40% quoted "Dry skin", 38% of women selected "skin pigmentation", 20% chose "wrinkles and fine lines" and 18% of women selected "Acne or pimples" as their skin related problem.



Use of moisturizers

Based on the objective of this study - to find if the moisturizers are beneficial, women were asked if they have included a moisturizer in their skincare routine.

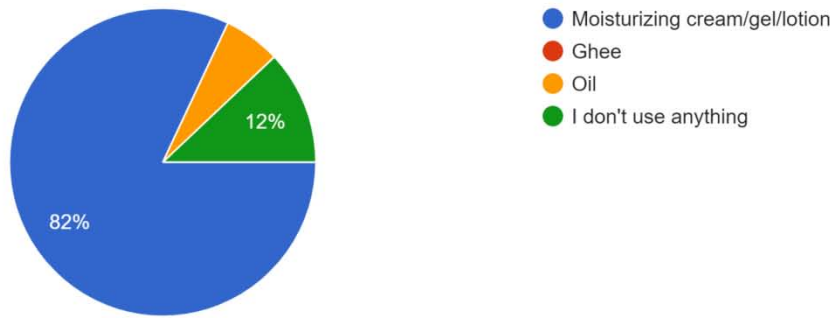
Of all the women who submitted the responses, 64% of them claimed to be using a moisturizer, 24% of women chose the option “sometimes” and 12% of women mentioned that they never use a moisturizer.



Type of moisturizers used

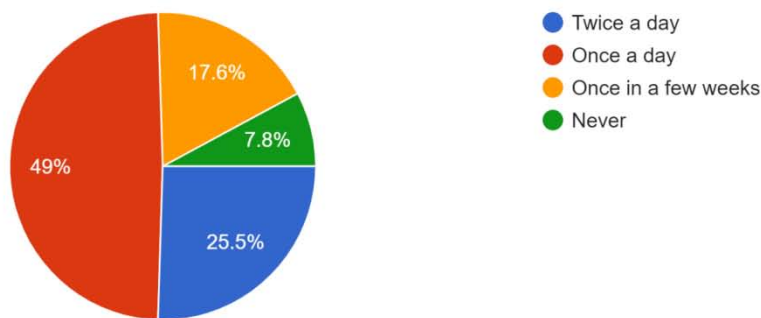
So as to get more data with respect to the use of moisturizers, women were asked to select the type of moisturizer that they were using.

Based on the collected data, 82% of women claimed to be using a moisturizing cream or gel or lotion to combat the dry skin. Whereas only 6% claimed to use an oil and 12% of women mentioned that they do not use any kind of moisturizer.



Frequency of moisturizer use

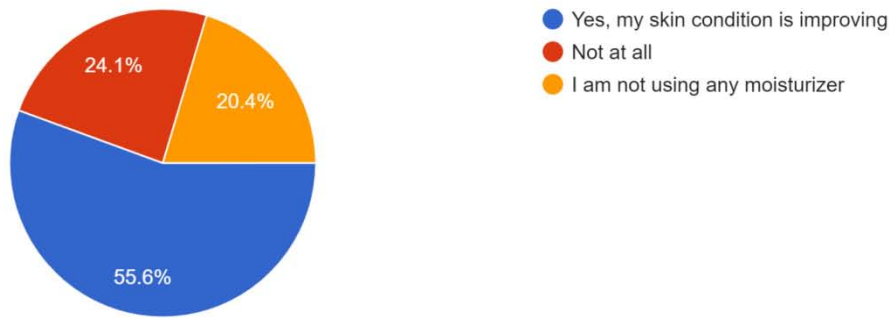
To gain more details with respect to the moisturizer use, women were asked to quote the frequency at which they were using a moisturizer. Based on the responses achieved for this question, majority of women (49%) claimed to use the moisturizer once a day, 25.5% of women mentioned that they use a moisturizer twice a day, 17.6% of women chose “once in a few weeks” and a small percentage of women (7.8%) claimed of never using any moisturizer.



Is a moisturizer effective?

Skin dehydration is the most important characteristic of aging skin and that is why with increasing age the use of moisturizing products becomes crucial. Moisturizers are the most underrated formulations. Their role in skincare routine is way beyond just moisturization. Moisturizers play a critical role in daily maintenance of healthy skin by replacing the natural skin oils, covering tiny fissures and providing a protective film on the skin. Moisturizers help to decrease the evaporation of the skin’s moisture, maintain hydration and improve the appearance of the tactile properties of the skin. Moisturizers are the formulations which help in maintaining 10-30% water content of the skin. Many people believe that the skin requires moisturization only during winters. But the regions where summers are harsh and mostly dry, the soaring sunlight absorbs the moisture from the skin leaving it dry and flaky. It is also found that skin moisture levels are lower at higher temperatures and the feelings of dryness on bare skin are high in low humidity (9).

Based on this background, women were asked if they are finding any positive difference in their skin after using a moisturizer with respect to the skin conditions they were suffering from. As per the responses received, the majority of women (55.6%) said that their skin condition is improving because of the moisturizer, 24.1% of women claimed to not see any improvement in their skin conditions and around 20% of women mentioned that they do not use any moisturizer at all.



Conclusion and Recommendation

Based on the responses received to the questionnaire our conclusion adheres to our objective of finding out if moisturizers could play an essential role in women from their 30s. Choosing correct moisturizer and using it consistently can dramatically improve the skin conditions in women post their 30s. Moisturizers containing emollients and/or humectants and/or occlusives and/or rejuvenators, are very effective in maintaining the skin hydration levels and the healthy skin barrier properties.

As skin is the first and foremost organ which starts showing effects of aging which are related to decreased levels of estrogen and also certain environmental factors, leading to changes in skin conditions. Stratum corneum, the outermost layer of the skin provides a barrier to loss of water from the skin. This barrier permits retention of water in the skin preventing the formation of cracks. Disturbance of the skin barrier is central to all dry skin conditions and cracks once developed can allow easy penetration of irritants and allergens.

Moisturizing products with emollient or humectant or occlusive properties help in retention of water and therefore in the maintenance of healthy skin barrier.

Women should be made aware of this and should be encouraged to include moisturizing products in their skincare routine as early as possible. Maintaining essential water levels in the skin (with the use of moisturizing products) is associated with the skin's moisture or the maintenance of skin hydration, maintenance of a healthy skin barrier, improvement in the appearance as well as the tactile properties of the skin.

References:

1. Graham-Brown, R. (1997). Dermatologic problems of the menopause. *Clinics in Dermatology*, 15(1), 143–145. [https://doi.org/10.1016/s0738-081x\(96\)00116-2](https://doi.org/10.1016/s0738-081x(96)00116-2)
2. Thornton, M. J., Taylor, A. H., Mulligan, K., Al-Azzawi, F., Lyon, C. C., O'Driscoll, J. B., & Messenger, A. (2003). The Distribution of Estrogen Receptor β Is Distinct to That of Estrogen Receptor α and the Androgen Receptor in Human Skin and the Pilosebaceous Unit. *Journal of Investigative Dermatology Symposium Proceedings*, 8(1), 100–103. <https://doi.org/10.1046/j.1523-1747.2003.12181.x>
3. Shah, M.G., Maibach, H.I. Estrogen and Skin. *Am J Clin Dermatol* 2, 143–150 (2001). <https://doi.org/10.2165/00128071-200102030-00003>
4. Katz, H. I., & Prystowsky, J. H. (2007). Menopause and the skin. In *Elsevier eBooks* (pp. 237–249). <https://doi.org/10.1016/b978-012369443-0/50022-3>
5. Tominaga, M., & Takamori, K. (2022). Peripheral itch sensitization in atopic dermatitis. *Allergology International*, 71(3), 265–277. <https://doi.org/10.1016/j.alit.2022.04.003>

6. Turan, N., Kapıcıoğlu, Y., & Saraç, G. (2017). The effect of skin sebum, pH, and moisture on demodex infestation in acne vulgaris and rosacea patients. *Türkiye Parazitoloji Dergisi*, 41(3), 143-147. <https://doi.org/10.5152/tpd.2017.5068>
7. Lodén, M. (2003). Role of topical emollients and moisturizers in the treatment of dry skin barrier disorders. *American Journal of Clinical Dermatology*, 4(11), 771–788. <https://doi.org/10.2165/00128071-200304110-00005>
8. Lichterfeld-Kottner, A., Lahmann, N., Blume-Peytavi, U., Mueller-Werdan, U., & Kottner, J. (2018). Dry skin in home care: A representative prevalence study. *Journal of Tissue Viability*, 27(4), 226–231. <https://doi.org/10.1016/j.jtv.2018.07.001>
9. Egawa, M., Koizumi, K., & Hirao, T. (2020). Changes in facial moisture distribution and feelings of moisture/dryness among various environmental temperatures and humidities in summer and winter. *Skin Research and Technology*, 26(6), 937–948. <https://doi.org/10.1111/srt.12898>
10. Cork, M. J. (1997). The importance of skin barrier function. *Journal of Dermatological Treatment*, 8(sup1), S7–S13. <https://doi.org/10.3109/09546639709160948>
11. Lipozencić J, Pastar Z, Marinović-Kulisić S. Moisturizers. *Acta Dermatovenerol Croat*. 2006;14(2):104-8.