

Perigel

Jurnal Penyuluhan Masyarakat Indonesia

Alamat Redaksi : Gedung Rektorat UNTAG Semarang. Kantor LPM UNTAG Lantai 2. Jln Bendan Dhuwur, Kecamatan Gajahmungkur, Kota Semarang.

Editorial Team

SUSUNAN REDAKSI JURNAL PERIGEL UNTAG SEMARANG

PENANGGUNG JAWAB

Prof. Dr. Emiliana Sri Pudjiarti, M.Si

KETUA DEWAN REDAKSI

Dr. Honorata Ratnawati Dwi Putranti, SE, MM

ANGGOTA DEWAN REDAKSI

- 1. Dr. H. Agus Wibowo, S.H., M.Si, (Kepala LPM Universitas 17 Agustus 1945 Semarang)
- 2. <u>Alif Lombardoaji Sidiq, S.Si., M.Si</u>, Universitas 17 Agustus 1945 Semarang
- 3. Jaka Prayudha, S.Kom, M.Kom ; STMIK TRIGUNA DHARMA
- 4. Ir. Indriyani, A.P., S.T., M.Si. ; Universitas Sang Bumi Ruwa Jurai
- 5. <u>Kalis Amartani, S.Si., M.P.</u>; Universitas Lakidende
- 6. Laela Nur Rokhmah, S.TP., M.Sc. ; Politeknik Santo Paulus Surakarta
- 7. <u>Nono Heryana, M.Kom</u> ; Universitas Singaperbangsa Karawang
- 8. <u>Ns. Puji Purwaningsih, S.Kep., M.Kep</u>; Universitas Ngudi Waluyo
- 9. Rahmad Purwanto, M.Si, ; Universitas 17 Agustus 1945 Semarang
- 10. Hangga Novian, S.AB. MSi, ; Universitas 17 Agustus 1945 Semarang

PEER REVIEWER/MITRA BESTARI

- 1. Rini Oktavera, ST, M.MT ; Univ WR Supratman
- 2. Rizky Septika Utami, SP., MP ; Universitas Pat Petulai
- 3. Roberta Uron Hurit, S. Si., M. Pd.; Institut Keguruan dan Teknologi Larantuka
- 4. Santalia Banne Tondok, S.Kep.,Ns.M.Kep ; Poltekkes Kemenkes Jayapura
- 5. Sri Huning Anwariningsih, ST, M.Kom ; Universitas Sahid Surakarta

PELAKSANA TEKNIS

Danang S.Kom, M.T. Universitas Sains dan Teknologi Komputer

ADMINISTRASI DAN PUBLIKASI

Maradona Asri, S.E, Universitas 17 Agustus 1945 Semarang

SK EDITOR/REVIEWER





Perigel: Jurnal Penyuluhan Masyarakat Indonesia Vol. 2, No. 2 Juni 2023 e-ISSN: 2964-0881; p-ISSN: 2964-1004, Hal 06-14 DOI: <u>https://doi.org/10.56444/perigel.v2i2</u>



Community Service Activities – Education And Skin Hydration Screening For Productive Age Group

Sukmawati Tansil Tan^{1*}, Alexander Halim Santoso², Ernawati Ernawati³, Yohanes Firmansyah⁴, Joshua Kurniawan⁵, Jasmine Syabania Noviantri⁶

 ¹Department of Dermatology and Venereology, Faculty of Medicine, Tarumanagara University; e-mail: <u>sukmawati@fk.untar.ac.id</u>
²Department of Public Health and Family Medicine, Faculty of Medicine, Tarumanagara University; e-mail: <u>ernawati@fk.untar.ac.id</u>
³Department of Clinical Nutrition, Faculty of Medicine, Tarumanagara University; e-mail: <u>alexanders@fk.untar.ac.id</u>
⁴Faculty of Medicine and Health Sciences Atma Jaya Catholic University, Jakarta, Indonesia; email: <u>yohanesfirmansyah28@gmail.com</u>
⁵Faculty of Medicine, Tarumanagara University, Jakarta, Indonesia; e-mail: <u>joshua.406202071@stu.untar.ac.id</u>
⁶Faculty of Medicine, Tarumanagara University, Jakarta, Indonesia; e-mail: <u>jasmine.405200138@stu.untar.ac.id</u>

Article History: Abstract: Hydration of the epidermis refers to the Received: 11 Maret 2023 maintenance of the skin's natural moisture balance. Revised: 12 April 2023 This is accomplished by providing and sustaining an Accepted: 17 Mei 2023 adequate level of moisture in the skin layer. Hydration of the skin is essential for sustaining healthy and beautiful skin, as well as preventing skin issues like *Keywords: Skin Hydration*; dryness, redness, irritation, and premature aging. The *Early Detection; Community* Skin Hydration Counseling and Screening activities Education seek to prevent dry skin issues by educating the public on the significance of maintaining skin hydration. Through this activity, participants learned about the risk factors for dry skin, the significance of using the proper moisturizer, and how to keep the skin nourished. In addition, screenings are conducted to detect skin hydration issues early on and provide treatment recommendations. It is hoped that by increasing people's knowledge and understanding of skin hydration, they will adopt appropriate care practices and prevent dry skin from occurring. This activity contributes significantly to participants' improved skin health and quality of life.

*E-mail Correspondence: sukmawati@fk.untar.ac.id

INTRODUCTION

Skin hydration refers to the maintenance of the skin's inherent moisture equilibrium. This is accomplished by providing and sustaining an adequate level of moisture in the skin layer. Hydration of the skin is essential for sustaining healthy and beautiful skin, as well as preventing skin issues like dryness, redness, irritation, and premature aging.^{1,2}

The significance of hydrated epidermis cannot be overlooked. Hydrated skin appears healthier, more radiant, and more youthful. Listed below are several reasons why epidermis hydration is so crucial:^{3–5}

- 1. Keeping skin supple: Adequate hydration keeps skin soft by preventing moisture loss from the skin's layers. Soft skin is more comfortable and appears to be healthier.
- 2. Prevents dry skin: Dry skin can cause irritation, constriction, itching, and flaking. Regular skin hydration aids in the prevention and treatment of these issues, preserving the skin's suppleness and comfort.
- 3. Prevents premature aging: A lack of moisture in the epidermis can result in premature aging, such as the appearance of fine lines and wrinkles. By sustaining skin hydration, the skin can remain youthful, supple, and free of aging signs.
- 4. Maintain skin elasticity: Moisturized skin is more elastic. This reduces the risk of developing wrinkles and sagging skin because the skin is better able to return to its initial shape after being stretched.
- 5. Facilitates the healing process: Adequate hydration is essential for the healing of wounds and skin injury. Skin that is adequately hydrated can speed up cell regeneration, repair damaged tissue, and reduce the risk of infection.
- 6. Improve absorption of skin care products: Well-hydrated skin is better able to absorb skin care products' nutrients and active ingredients. This maximizes the efficacy of products containing moisturizing agents, serums, and other active ingredients.

The importance of skin hydration increases with age, because healthy, well-hydrated skin has numerous benefits. The epidermis is the body's outermost protective layer, which is directly exposed to environmental elements such as sunlight, pollution, and humidity. Skin that is hydrated and healthy can help prevent environmental damage.⁶⁻⁸

Dry skin is a condition in which the skin loses its capacity to retain and retain moisture. In the prime of life, flaky skin can be a common issue. Excessive sun exposure, hormonal changes, the use of unsuitable skin care products, dry conditions, and an unhealthy lifestyle can all contribute to dry skin.^{1,3,7}

Dry skin can cause a variety of symptoms, including discomfort, tightness, itching, redness, and flaking. In addition, dehydrated skin can exacerbate wrinkles and accelerate aging.

Consequently, it is essential to maintain consistent epidermis hydration.^{5,7,9}

There are measures one can take to maintain hydrated skin. First, it is essential to consume enough water daily. Water keeps the epidermis hydrated from within. In addition, it is crucial to use an appropriate emollient. Choose a moisturizer with glycerin or hyaluronic acid, which help attract and retain hydration on the skin's surface. After showering or washing your face, apply a moisturizer to seal in moisture.^{2,9,10}

Additionally, avoid using products containing harsh chemicals or fragrances, which can irritate and dry the skin. Use an alcohol-free, gentle cleanser to clean the epidermis. Additionally, protection from the sun is essential. Always use a sunscreen with an appropriate SPF when outdoors.^{10,11}

It is also necessary to maintain optimal skin hydration by consuming a healthy diet. Consuming antioxidant-rich foods, such as fruits and vegetables, can help keep the epidermis hydrated. Additionally, avoid excessive alcohol consumption and smoking, as both can dehydrate the epidermis.

In order to prevent premature aging in the future, the Community Service Team is interested in carrying out social activities involving counseling and skin hydration detection.

METHOD

In carrying out skin hydration counseling and screening activities, there are several methods, activity steps, as well as the PDCA (Plan-Do-Check-Act) cycle that can be followed. The following is a description of the methods, activity steps, and PDCA in carrying out these activities:

Method:

- 1. Counseling: Counseling is conducted to provide information and education to participants regarding the importance of skin hydration, factors that affect skin hydration, and steps to maintain optimal skin hydration. Extension methods can be in the form of lectures, presentations, group discussions, or using visual media such as videos or brochures.
- 2. Screening: Screening was conducted to evaluate the participant's skin hydration level. Screening methods can be done in several ways, for example using a special device to measure skin moisture levels, making visual observations of skin conditions, or using a questionnaire to assess signs of dehydration on the skin.

Activity Steps:

1. Planning (Plan): The planning stage includes identifying the target participants, determining the time and place of the activity, as well as the preparation of counseling materials and screening instruments. In addition, it is also necessary to identify the resources needed, such as teaching staff or supporting facilities.

- 2. Implementation (Do): At this stage, extension activities are carried out in accordance with the plans that have been prepared. The counseling material is delivered in a clear and structured manner, taking into account the needs of the participants. Screening was also carried out using a predetermined method, and the results of the screening were recorded.
- 3. Evaluation (Check): The evaluation phase is carried out to evaluate the effectiveness of counseling and screening activities. Evaluation can be carried out by gathering feedback from participants, analyzing screening data, and measuring the extent to which activity objectives have been achieved.
- 4. Corrective Action (Act): Based on the results of the evaluation, corrective actions can be taken to increase the effectiveness of future activities. Corrective action could be in the form of improving the counseling materials, adjusting the screening method, or changing the activity implementation strategy.



Figure 1. Plan, Do, Check, Act (PDCA) Cycle¹²

RESULTS

This Community Service activity had 72 participants, 20 males and 52 females. All respondents received counseling, and their blood sugar levels were measured at the same time. The outcomes of each activity are detailed in Table 1, and photographs of the activities are depicted in Figures 2 and 3.

Parameter	N (%)	Mean (SD)	Med (Min – Max)
Ages (years)		38,94 (13,18)	37 (19 - 60)
Gender			
• Male	20 (27,8%)		
• Female	52 (72,2%)		
Skin Hydration (%)		56,93 (6,40)	60 (36 - 60)

Table 1. Basic Data of Participants



Figure 2. Hydration Measurement Activity Process



Figure 3. Process for Simple Testing of Skin Products Containing Hazardous Substances

DISCUSSION

Skin hydration is an important process in maintaining skin health and beauty. Having wellhydrated skin has a number of significant benefits. The following is a description of the importance of maintaining skin hydration and risk factors for dry skin:^{5,7,8}

- 1. The importance of maintaining skin hydration:
 - a. Well-hydrated skin looks fresher, brighter and more radiant. Hydration helps maintain skin softness and suppleness, so skin feels smoother and softer to the touch.
 - b. Optimal skin hydration helps maintain skin elasticity. This means the skin is more able to stretch and spring back to its original shape, reducing the risk of developing fine lines and wrinkles.
 - c. Well-hydrated skin is better able to protect itself from environmental damage, such as exposure to sunlight, pollution and harmful chemicals. The hydration layer helps

maintain skin integrity and reduces the risk of irritation and inflammation.

- d. Adequate hydration also contributes to a healthy skin regeneration process. Wellhydrated skin has a better ability to repair damage, reduce inflammation, and accelerate wound healing.
- 2. Risk factors for dry skin:
 - a. Environmental exposure: External factors such as sunlight, wind, cold temperatures and low humidity can reduce the skin's natural moisture barrier and cause dryness.
 - b. Age factor: Skin tends to lose moisture with age. The natural aging process reduces natural oil production and decreases the skin's ability to retain water.
 - c. Hormonal changes: Hormone fluctuations, especially in women during pregnancy, menopause, or the menstrual cycle, can cause changes in skin moisture.
 - d. Using the wrong products: Using skin care products that contain harsh chemicals, artificial fragrances, or alcohol can disturb the skin's moisture balance and cause dry skin.
 - e. Lifestyle factors: Smoking habits, excessive alcohol consumption, lack of water intake, and unhealthy diet can affect skin hydration.

Addressing dry skin and taking proper precautions is essential for maintaining skin hydration and overall skin health. Here are some ways to deal with dry skin and preventive steps that can be taken:^{1,2,6,7}

- 1. Use moisturizer: Use a moisturizer suitable for your skin type every day. Choose a moisturizer that contains ingredients like glycerin, hyaluronic acid, or natural oils to help keep your skin moisturised.
- 2. Bathe with warm water: Avoid bathing with hot water which can remove the skin's natural oils. Use warm water and avoid taking too long a bath to keep the skin moist.
- 3. Use mild soap: Use mild soap or facial cleanser that doesn't contain harsh ingredients that can dry out the skin.
- 4. Avoid using products that contain alcohol: Skin care products that contain alcohol can make the skin drier. Avoid using these products and choose those that are alcohol-free or with a low alcohol content.
- 5. Drink enough water: Make sure you drink enough water every day to keep your skin moisturised from within.
- 6. Use sun protection: Sun exposure can dry out the skin. Use sunscreen with an appropriate SPF and avoid direct sun exposure during hot hours.
- 7. Use lip balm: Lips are also prone to dryness. Use a lip balm or lip balm that contains natural

ingredients to keep your lips moist.

- 8. Avoid excessive use of space heaters: Heaters can reduce humidity in the air, causing dry skin. Use a humidifier or place a container of water indoors to maintain humidity.
- 9. Maintain a healthy diet: Eating foods rich in nutrients, such as fruits, vegetables, and healthy fats, can help maintain healthy skin.
- 10. Avoid excessive stress: Stress can affect hormonal balance and worsen skin conditions. Find ways to manage stress, such as meditation, exercise, or a fun hobby.

Skin hydration education and screening activities have an important role in maintaining healthy skin and preventing skin problems associated with dryness. The following is a description of the importance of counseling and skin hydration screening activities:

- 1. Awareness raising: Outreach activities regarding skin hydration can increase public awareness of the importance of maintaining regular skin hydration. With better knowledge about the benefits of skin hydration, individuals are more likely to take the necessary steps to keep their skin hydrated.
- 2. Early detection of skin problems: Through screening activities, an individual's skin hydration level can be evaluated. This allows early identification of skin problems such as dry or dehydrated skin. By detecting this problem early, proper treatment and preventive measures can be taken to treat the problem before it becomes more serious.
- 3. Prevention of skin problems: Promotional activities and skin hydration screening help prevent skin problems such as dry, cracked skin, itching, and skin irritation. With a good understanding of the factors that can lead to dry skin and ways to keep skin hydrated, individuals can adopt the right habits and avoid the risk of developing skin problems.
- 4. Appropriate skin care: Through counseling activities, individuals are given information about the type of moisturizer that is suitable for their skin and how to use it correctly. This knowledge is important in choosing the right skin care products and optimizing the benefits of skin hydration. In addition, participants can also learn about other care measures, such as using lip balm, using sunscreen, and practicing proper skin hydration after bathing.
- 5. Improved quality of life: Good skin hydration has a positive impact on a person's quality of life. Healthy, well-hydrated skin provides a sense of well-being and enhances self-confidence. By keeping the skin hydrated, individuals can feel better physically and emotionally.

Thus, skin hydration screening and education activities play an important role in preventing skin problems, raising awareness of the importance of skin hydration, and improving the quality of life of individuals. Through this activity, people can be more aware and involved in maintaining healthy skin and preventing skin problems related to dryness.

CONCLUSION

Promotional activities and skin hydration assessment are essential for maintaining healthy skin and avoiding dryness-related skin problems. Through this activity, people's awareness of the significance of skin hydration can be raised, skin problems can be detected earlier, and preventative measures can be taken as necessary. With a thorough understanding of how to keep skin moisturized, individuals can adopt the proper habits, select appropriate skin care products, and avoid dryness-related skin issues. Through appropriate treatment, the individual's quality of life and self-esteem can improve. Therefore, counseling and skin hydration assessment play an important role in maintaining skin health and enhancing quality of life.

REFERENCE

- . Verdier- Sévrain S, Bonté F. Skin hydration: a review on its molecular mechanisms. J Cosmet Dermatol. 2007;6(2):75–82.
 - Fowler J. Understanding the role of natural moisturizing factor in skin hydration. Pr Dermatol. 2012;9:36–40.
- Nacht S, Close J-A, Yeung D, Gans EH. Skin friction coefficient: changes induced by skin hydration and emollient application and correlation with perceived skin feel. J Soc Cosmet Chem. 1981;32(2):55–65.
 - Oranges T, Dini V, Romanelli M. Skin physiology of the neonate and infant: clinical implications. Adv wound care. 2015;4(10):587–95.
 - Farage MA, Miller KW, Berardesca E, Maibach HI. Clinical implications of aging skin: cutaneous disorders in the elderly. Am J Clin Dermatol. 2009;10:73–86.
 - Flynn TC, Petros J, Clark RE, Viehman GE. Dry skin and moisturizers. Clin Dermatol. 2001;19(4):387–92.
 - Spencer TS. Dry skin and skin moisturizers. Clin Dermatol. 1988;6(3):24–8.
 - Hashizume H. Skin aging and dry skin. J Dermatol. 2004;31(8):603–9.
 - White-Chu EF, Reddy M. Dry skin in the elderly: Complexities of a common problem. Clin Dermatol. 2011;
 - Agustina L, Shoviantari F, Yuliati N. Penyuluhan Kosmetik yang Aman dan Notifikasi Kosmetik. J Community Engagem Empower. 2020;2(1).
 - Fajriah L, Abdillah MH, Retnaningsih A, Feladita N, Oktaviantari DE. Penyuluhan Penyalahgunaan Bahan Kosmetik Berbahaya di SMK PGRI 2 Pringsewu. J Kreat Pengabdi Kpd Masy. 2021;4(1):169–74.
 - Kozai T. Plant production process, floor plan, and layout of PFAL. In: Plant Factory [Internet]. Elsevier; 2020. p. 261–71. Available from: https://linkinghub.elsevier.com/retrieve/pii/B9780128166918000194