Review Article

World Journal of Pharmaceutical and Life Sciences WJPLS

www.wjpls.org

SJIF Impact Factor: 7.409

VITALITY DOWN THERE; NURTURING INTIMATE WELLNESS

Kush Batra¹, Dr. Bhumika Chandrakar^{*2}, Pratibha Hanspal³ and Arshiya Sheikh⁴

^{1,3,4}Rungta Institute of Pharmaceutical Sciences and Research. ²Rungta Institute of Pharmaceutical Sciences.



*Corresponding Author: Dr. Bhumika Chandrakar Rungta Institute of Pharmaceutical Sciences.

Article Received on 29/10/2024

Article Revised on 20/11/2024

Article Accepted on 11/12//2024

ABSTRACT

Intimate hygiene plays a pivotal role in maintaining overall health and well-being, yet it remains a topic often overlooked or misunderstood. This comprehensive review delves into various aspects of intimate hygiene, encompassing anatomy, common practices, challenges, and recommendations. Exploring the male and female genitalia's anatomy and physiology lays the foundation for understanding proper hygiene practices. The review examines prevalent diseases and infections associated with poor hygiene, emphasizing the importance of personalized recommendations and education in mitigating risks. Challenges such as cultural taboos, product selection, and environmental impact are addressed, highlighting the need for tailored interventions and awareness campaigns. Additionally, the review underscores the significance of accessible educational resources, including articles, infographics, and video tutorials, in promoting healthy habits. Moving forward, collaborative efforts between healthcare providers, educators, and policymakers are crucial in fostering a culture of openness, empowerment, and proactive intimate hygiene practices.

KEYWORDS: Intimate Hygiene, Infections, Awareness, Hygiene practices, Sexual Health, Menstrual Health.

1. INTRODUCTION

Intimate hygiene involves caring for the genital and surrounding areas like the vulva, vagina, penis, and scrotum.

It's about staying fresh, comfortable, and healthy in those areas through daily cleansing rituals tailored to individual needs and cultural practices.

Choosing the right products, like soaps and wipes, is important, considering factors such as skin sensitivity and pH balance.

Maintaining the delicate pH balance of the vagina is crucial for preventing infections, especially during menstruation or after sex.

Beneficial bacteria in the genital area help protect against infections, so practices like douching or using harsh products should be avoided to maintain this balance.

Intimate hygiene also includes clothing choices, sexual health practices, and overall lifestyle habits.

By being mindful of these factors and adopting healthy habits, individuals can support their genital health and overall well-being. **The external female genitalia**^[4] include several parts that serve different functions.

The Mons pubis is a rounded fatty area over the pubic bone, covered with hair during puberty. It acts as a cushion during sexual activity.

Labia Majora are the outer "lips" of the vulva, consisting of fatty tissue and skin. They protect the openings of the vagina and urethra and contain sweat and oil glands.

Labia Minora are the inner "lips" of the vulva, thinner and more delicate. They cover and protect the clitoris, urethral, and vaginal openings.

The Clitoris is a highly sensitive organ located at the top of the vulva, containing erectile tissue and crucial for sexual arousal.

The Clitoral Hood is a fold of skin covering the clitoris, providing protection.

The Vestibule is the area enclosed by the labia minora, containing the urethra and vaginal openings. It serves as the exit for urine and the entrance to the reproductive tract.

The Urethral Opening is located above the vaginal opening in the vestibule, allowing the removal of urine from the bladder.

The Vaginal Opening is the entrance to the vagina, serving as the passage for sexual intercourse and childbirth.

The Perineum is the skin and muscle area between the vaginal opening and anus. It supports the pelvic floor, aids in bowel and bladder control, stretches during childbirth, and contains nerves and blood vessels for sexual pleasure and function.^{[2][4]}

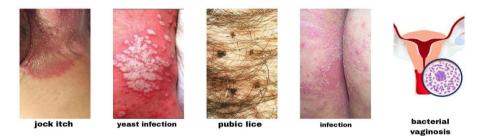
1.1. Male external genitalia^{[2][5]}

Understanding the external anatomy of the male genitalia is vital for various aspects of health and well-being, including hygiene, reproductive health, and addressing potential issues like injuries, infections, or sexual dysfunction. The Pubic Region, located above the penis, includes the Mons pubis, a mound of fatty tissue covered in hair, acting as a protective cushion. The Penis, the primary external reproductive organ in males, comprises several parts: the Glans Penis, a sensitive tip rich in

nerve endings; the Foreskin (Prepuce), a retractable fold of skin covering the glans in uncircumcised males, maintaining moisture and sensitivity; the Shaft, a cylindrical portion containing erectile tissue that fills with blood during arousal, causing an erection; the Corpora Cavernosa, two columns of erectile tissue along the upper side of the shaft; the Corpus Spongiosum, a column of erectile tissue along the underside of the shaft, surrounding the urethra to maintain its patency during erection; and the Urethral Opening, located at the tip of the glans penis, serving as the exit for urine and semen during ejaculation. The Scrotum, a pouch of skin and muscle behind the penis, contains the testes and helps regulate their temperature to support sperm production. The Testes, oval-shaped organs within the scrotum, produce sperm and secrete testosterone, the primary male sex hormone.^{[2][5]}

2. COMMON DISEASES AND INFECTION

Maintaining proper and healthy intimate hygiene is vital for preventing numerous diseases and infections.



Some common vaginal issues include yeast infections (Candidiasis), caused by yeast overgrowth due to poor hygiene or antibiotic use. Bacterial Vaginosis arises from an imbalance of vaginal bacteria, causing odor and discharge. Urinary Tract Infections (UTIs) occur when bacteria enter the urinary tract, often due to poor hygiene. Sexually Transmitted Infections (STIs) like Chlamydia, gonorrhea, and genital herpes spread through sexual contact and affect intimate areas. Pubic Lice (Crabs) are small parasites infesting pubic hair, typically spread through close contact.^{[6],[7],[8],[9]}

2.1. Some prevention and treatment methods related to intimate diseases includes

For yeast infections (Candidiasis), practice good hygiene, avoid tight clothing, use mild soaps, and avoid douching. Treatment includes antifungal medications prescribed by a healthcare provider.

To prevent Bacterial Vaginosis, avoid douching, practice safe sex, wear cotton underwear, and avoid scented products. Treatment involves antibiotics prescribed by a healthcare provider.

Preventing Urinary Tract Infections (UTIs) includes

drinking enough water, good bathroom hygiene, wiping front to back, urinating after sex, and not holding urine for too long. Treatment typically involves antibiotics prescribed by a healthcare provider based on the specific bacteria causing the infection.

Preventing Sexually Transmitted Infections (STIs) involves safe sex practices, limiting sexual partners, regular STI screenings, and open communication. Treatment varies depending on the type of STI and may include antibiotics, antiviral medications, or antiretroviral therapy.

To prevent Pubic Lice (Crabs), practice safe sex, avoid sharing personal items, and maintain good personal hygiene. Treatment includes medicated shampoos or lotions, along with washing bedding and clothing to remove lice or eggs.^{[6][7][8][9]}

Regular check-ups with a healthcare provider help detect risks early. Pay attention to your body and seek medical attention for any noticeable changes. Follow the treatment regimen prescribed by a healthcare provider and complete the full course of medication, even if symptoms improve.

Vol 11, Issue 1, 2025.

3. MENSTRUAL HEALTH

Menstrual health is a critical component of global population health, playing a pivotal role in achieving fundamental development goals and advancing gender equality and human rights. It's imperative to recognize that individuals who experience a menstrual cycle, including women, girls, and people of diverse gender identities, may face unique challenges shaped by their lived experiences, needs, and circumstances.^[10]

Effective menstrual hygiene management interventions, such as access to sanitary pads, education, awareness programs, and the provision of separate, sanitary toilet facilities, have far-reaching impacts on the education and empowerment of girls.^[10]

Adolescence is a period marked by significant physical and psychological changes for young women. While serious gynaecological pathology is rare in this age group, menstrual changes are common and can exacerbate the challenges of this transitional phase for adolescents and their families.

Disorders resulting from improper menstrual hygiene, such as dysmenorrhoea, amenorrhea and abnormal vaginal bleeding, affect a significant proportion of adolescent females, impacting their quality of life and school attendance.

Polycystic ovary syndrome (PCOS) stands out as the most common endocrine disorder in young adult women. Gynaecologists play a crucial role in recognizing, monitoring, educating, and managing patients with menstrual disorders, including those grappling with PCOS.^[11]

By addressing menstrual hygiene and related health issues comprehensively, we can promote the well-being and empowerment of individuals across diverse communities and contribute to broader efforts aimed at achieving global health equity and gender justice.^{[10][11]}

4. INTIMATE HYGIENE PRACTICES

4.1. Intimate hygiene habits

Maintaining good intimate hygiene is essential for overall health. Here are some daily habits to keep in mind.^{[3][12]}

Ensure to bathe regularly, cleaning the genital area with mild, unscented soap and water every day. When wiping after using the toilet, always go from front (vagina) to back (anus) to prevent bacteria from entering the vagina. It's important to wear clean, breathable cotton underwear and change them daily. Opt for loose-fitting clothing to allow airflow and prevent irritation. Remember to urinate after sex to remove bacteria and reduce the risk of urinary tract infections (UTIs). Practice safe sex by using contraceptives or protection to prevent sexually transmitted infections. Avoid douching as it can disrupt the natural pH balance and lead to infections. Arrange routine gynecological exams for frequent check-ups to monitor reproductive health and detect any changes in intimate well-being.^{[1][3]}

4.2. Dos and don'ts related to intimate hygiene

Maintaining good intimate hygiene is important for overall health. Here are some key practices to remember: Using mild and unscented soap for cleaning is essential, as well as practicing safe sex and wearing breathable cotton underwear. Remember to wipe from front to back after using the toilet and stay hydrated by drinking enough water. It's also important to urinate after sex and have routine check-ups to monitor your health.

On the other hand, it's best to avoid using harsh soaps or douches, as they can disrupt the natural pH balance of the vagina. Tight clothing should also be avoided, as it can trap moisture and heat. Never ignore any changes in the intimate area and seek medical attention if needed. Additionally, it's important not to share personal items like underwear or towels to prevent the spread of infections.^[12]

4.3. Importance of intimate hygiene

Maintaining intimate hygiene is crucial for various reasons.

Firstly, it helps prevent infections like urinary tract infections (UTIs), yeast infections, and bacterial vaginosis. Good hygiene practices also reduce odors caused by bacteria and sweat accumulation. Moreover, cleanliness and protection during sex are essential for preventing sexually transmitted infections (STIs) and maintaining reproductive health. Feeling clean and fresh promotes comfort and confidence during intimate interactions. Neglecting intimate hygiene can lead to skin irritation, inflammation, and more severe infections. Overall, intimate hygiene contributes to physical, mental, and emotional well-being, making it an important aspect of daily life for our overall health and wellness.^{[12][1][3]}

5. PRODUCTS AND PHARMACEUTICALS

Intimate hygiene products play a crucial role in maintaining cleanliness, comfort, and overall well-being in the genital area. From soaps and wipes to creams and suppositories, there is a wide range of products available on the market designed specifically for intimate use. In this section, we will explore the various types of intimate hygiene products, their ingredients, and considerations for choosing safe and effective options.^[1]

1. Overview of Intimate Hygiene Products

Intimate hygiene products serve specific needs for maintaining cleanliness and comfort in the genital area: Intimate Cleansers: These are gentle cleansers designed to maintain the natural pH balance and microbiome while effectively removing dirt, sweat, and odor.

Intimate Wipes: Disposable wipes offer convenient onthe-go cleansing and refreshing. It's important to choose alcohol-free and fragrance-free options to avoid irritation.

Feminine Hygiene Sprays: These sprays provide a quick refresh between showers but should be used sparingly and avoided if they contain harsh chemicals or fragrances.

Moisturizers and Lubricants: These products help alleviate dryness and discomfort, especially during intercourse or menopause.

Deodorants and Powders: Some may use deodorizing sprays or powders to control odor. It's essential to choose products formulated for the genital area to avoid irritation or allergic reactions.^[1]

2. Ingredients to Avoid

Harsh Chemicals: Products containing harsh chemicals such as parabens, sulfates, and phthalates can disrupt the natural pH balance of the genital area and lead to irritation or allergic reactions.

Fragrances and Dyes: Fragrances and dyes may impart a pleasant scent or color to products, but they can also cause irritation, especially for individuals with sensitive skin.

Alcohol: Alcohol-based products can strip the skin of its natural oils and cause dryness and irritation, making them unsuitable for intimate use.

3. Pharmaceutical Options for Intimate Wellness

Antifungal Medications: Over-the-counter antifungal creams and suppositories are commonly used to treat yeast infections, but prescription-strength medications may be necessary for severe or recurrent infections.

Antibiotics: Antibiotics are prescribed to treat bacterial infections such as bacterial vaginosis or urinary tract infections, but they should be used judiciously to avoid antibiotic resistance.

Hormonal Treatments: Hormonal therapies may be recommended for individuals experiencing hormonal imbalances or conditions such as menopausal symptoms or polycystic ovary syndrome (PCOS).

Choosing the right intimate hygiene products is essential for maintaining optimal genital health and preventing irritation, infections, and other complications. Individuals should carefully read product labels, opt for gentle, pH-balanced formulations, and consult healthcare professionals if experiencing persistent symptoms or concerns. By making informed choices and prioritizing intimate wellness, individuals can enjoy comfort, confidence, and overall well-being in their daily lives.^{[1][3][12]}

6. CULTURAL AND SOCIAL PERSPECTIVE

Intimate hygiene practices are deeply influenced by cultural beliefs and social norms, shaping how individuals view cleanliness and personal care. Taboos and stigmas surrounding intimate hygiene can lead to secrecy and shame, hindering open communication and access to information about menstruation, sexual health, and genital hygiene. Cultural and religious beliefs impact practices, with some cultures emphasizing purity rituals or specific cleansing rituals. Social factors like gender norms and access to education also play a role, particularly affecting women's access to resources and healthcare. Education and awareness initiatives are crucial for challenging harmful stereotypes and promoting open dialogue. Community engagement, including collaboration with religious leaders and local influencers, helps break down barriers and foster positive attitudes towards intimate hygiene. By addressing cultural and social perspectives, we can create inclusive environments where individuals feel empowered to prioritize their intimate health and well-being.^{[14][15]}

7. DIGITAL HEALTH AND TECHNOLOGY IN INTIMATE WELLNESS

Recent advancements in digital health and technology have transformed how we approach intimate hygiene, offering new solutions for better health outcomes. Health tracking apps help monitor menstrual cycles and fertility, empowering users to manage their reproductive health. Telemedicine allows remote consultations with healthcare providers, offering convenience and accessibility. Wearable devices track intimate health indicators like menstrual cycles and sexual activity, providing real-time insights. Digital therapeutics offer behavioral interventions and educational programs for addressing sexual health concerns. AI and machine learning analyze data to personalize recommendations. IoT devices, like smart menstrual cups and pelvic floor trainers, offer enhanced functionality and monitoring. Embracing these technologies improves access to information and supports proactive management of intimate hygiene concerns, ultimately promoting better intimate health and well-being.^[16]

8. IMPACT OF INTIMATE HYGIENE ON MENTAL HEALTH

Maintaining proper intimate hygiene is essential for both physical and mental well-being. Neglecting hygiene can lead to discomfort, affect self-esteem, and cause embarrassment, impacting mental health negatively. Suitable hygiene practices are crucial for preventing infections like UTIs and yeast infections, which can lead to frustration, anxiety, and even depression. By practicing proper hygiene, individuals can reduce the risk of such infections, soothing their mental health. Regular bathing and cleaning of genital areas boost confidence and self-esteem, as people feel fresher and cleaner. Engaging in regular hygiene practices empowers individuals, providing a sense of control and promoting optimistic emotions. It also improves body image and self-perception, encouraging body positivity and fostering healthier relationships with one's body. Additionally, proper hygiene enhances sexual health, boosting confidence and comfort during intimate moments. Overall, practicing proper intimate hygiene positively impacts mental health, emphasizing the importance of maintaining good hygiene habits.^{[15][17]}

9. INTIMATE HYGIENE IN SPECIAL POPULATION

Intimate hygiene needs vary different among populations, including pregnant individuals, elderly, with disabilities, menopausal those individuals. transgender and nonbinary individuals, and those with chronic health conditions. Pregnant individuals should use gentle hygiene practices and avoid harsh chemicals. Elderly individuals need regular monitoring for signs of infection or irritation due to hormonal changes or reduced mobility. Individuals with disabilities may require assistance with hygiene tasks and access to adaptive aids. Menopausal individuals can benefit from moisturizing hygiene practices to alleviate discomfort. Transgender and nonbinary individuals need access to gender-affirming healthcare and inclusive hygiene products. Those with chronic health conditions should manage underlying conditions and adhere to recommended hygiene practices to minimize the risk of complications.

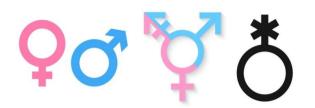
By recognizing and addressing the unique intimate hygiene needs of special populations, healthcare providers and caregivers can support individuals in maintaining optimal genital health and overall wellbeing. Tailoring hygiene recommendations and providing accessible resources and support are essential steps towards promoting inclusivity, dignity, and empowerment for all individuals, regardless of their health status or specific needs.^{[1][18]}

10. REGULATORY LANDSCAPE AND CONSUMER AWARENESS

Regulatory oversight in India for intimate hygiene products is primarily managed by the Central Drugs Standard Control Organization (CDSCO) and the Bureau of Indian Standards (BIS). CDSCO ensures compliance with safety and quality standards through regulations under the Drugs and Cosmetics Act and Rules. BIS sets standards to ensure the quality, safety, and efficacy of consumer products, including intimate hygiene products. Product labeling requirements mandate comprehensive information on composition and usage instructions in English and local languages. Educational initiatives by government health agencies, NGOs, and healthcare providers aim to raise awareness about intimate hygiene practices, debunk myths, and empower consumers. Consumer advocacy groups advocate for transparency and accountability in the industry. Challenges include misleading claims and cultural sensitivities, which can be addressed through stronger enforcement and culturally sensitive educational campaigns. Leveraging digital platforms for awareness campaigns can reach a wider audience, especially among younger demographics, enhancing public health outcomes and consumer satisfaction.^[19]

11. GENDER-SPECIFIC CONSIDERATIONS

Intimate hygiene practices may vary based on gender identity and anatomy, and it's essential to address specific considerations for different genders to ensure holistic health and well-being. Here are some genderspecific considerations:



Female hygiene encompasses menstrual hygiene, which involves using appropriate products such as pads, tampons, or menstrual cups for safe management. Additionally, proper vulva care is essential, including cleansing with mild, pH-balanced cleansers and avoiding harsh chemicals or douching to maintain vaginal health and prevent infections. During pregnancy and postpartum, women require extra care to prevent infections and promote healing, necessitating regular monitoring for symptoms and consultation with healthcare providers for guidance.^[3]

On the other hand, male hygiene involves regular genital care, including cleansing the penis and scrotum with mild soap and water to prevent bacterial build-up and maintain freshness. Circumcised men may need to pay special attention to hygiene around the circumcision site to prevent infection and promote healing, especially during the postoperative period.^[2]

Transgender and nonbinary individuals have unique hygiene needs, such as gender-affirming hygiene and chest binding care. Providing inclusive hygiene products and healthcare services that respect their gender identity is crucial. Additionally, cultural and religious considerations influence hygiene practices, emphasizing the importance of respecting diverse beliefs and providing culturally sensitive healthcare.^[20]

Gender-neutral hygiene options cater to individual preferences, promoting inclusivity and autonomy. By recognizing and addressing gender-specific considerations, healthcare providers can support individuals in maintaining optimal genital health and overall well-being, fostering a supportive and empowering environment for all.^{[20],[3]}

12. PREGNANCY AND POSTPARTUM HYGIENE

During pregnancy and postpartum, maintaining proper hygiene is crucial for the health of both the mother and the baby. To ensure hygiene during pregnancy, it's essential to clean the genital area gently with mild, unscented soap and warm water daily, avoiding harsh cleansers or douching that can disrupt the natural pH balance and lead to infections. Wearing comfortable, breathable cotton underwear helps keep the genital area dry, reducing the risk of irritation or infections. Proper wiping technique, from front to back after using the washroom, prevents bacteria from the anus entering the vagina, which can cause urinary tract infections (UTIs). Avoiding tight clothing is also important as it traps moisture, increasing the chances of yeast or fungal infections. Managing increased vaginal discharge with clean underwear and panty liners is usual during pregnancy.

In the postpartum period, special care is needed for the perineal area, especially after vaginal delivery. Using a peri-bottle filled with warm water to clean after using the washroom, followed by gentle drying with a towel, helps maintain hygiene. Constantly changing sanitary pads keeps the area dry, clean, and free from infections. Taking warm sitz baths can help ease discomfort and aid in healing after childbirth. It's crucial to avoid using harsh soaps, perfumes, or douches during this time as they can disturb the balance of vaginal flora and increase the risk of irritation or infection.

Practicing safe sex is important after childbirth, using contraceptives to reduce the risk of sexually transmitted infections (STIs), especially during breastfeeding when women may be more susceptible to infections. Every pregnancy and postpartum experience is different, so it's important to listen to the body and adjust the self-care routine accordingly. Prioritizing comfort and well-being during pregnancy and postpartum ensures the best outcomes for both the mother and the baby.^[21]

13. CONCLUSION

In conclusion, this review article has highlighted the importance of intimate hygiene in maintaining overall health and well-being, with a focus on both male and female populations. By exploring the anatomy and physiology of the genitalia, common hygiene practices, and associated diseases and infections, this article has provided valuable insights into the significance of proper hygiene routines. It has emphasized the need for personalized recommendations, education, and access to resources to promote healthy habits and prevent potential health issues. Moving forward, continued research, education, and awareness efforts are essential to address misconceptions, improve hygiene practices, and ultimately enhance the quality of life for individuals of all genders.

• **REFERENCES**

- 1 Holdcroft AM, Ireland DJ, Payne MS. The vaginal microbiome in health and disease—what role do common intimate hygiene practices play?. Microorganisms, Jan. 23, 2023; 11(2): 298.
- 2 Mangaldas L. The Sex Book. Harper Collins Publishers, 2022.
- 3 Fonjai M. Encountering a Patient in an Intimate Hygiene Care Situation.
- 4 Nguyen JD, Duong H. Anatomy, abdomen and pelvis, female external genitalia.
- 5 Clement P, Giuliano F. Anatomy and physiology of genital organs-men. Handbook of clinical neurology, Jan. 1, 2015; 130: 19-37.

- 6 Stapleton AE. The vaginal microbiota and urinary tract infection. Microbiology spectrum, Dec. 30, 2016; 4(6): 10-128.
- 7 Berg E, Benson DM, Haraszkiewicz P, Grieb J, McDonald J. High prevalence of sexually transmitted diseases in women with urinary infections. Academic Emergency Medicine, Nov. 1996; 3(11): 1030-4.
- 8 Anderson AL, Chaney E. Pubic lice (Pthirus pubis): history, biology and treatment vs. knowledge and beliefs of US college students. International journal of environmental research and public health, Feb. 2009; 6(2): 592-600.
- 9 Maji HS, Chatterjee R, Das D, Maji S. Fungal infection: An unrecognized threat. InViral, parasitic, bacterial, and fungal infections, Jan. 1, 2023; 625-644. Academic Press.
- 10 Hennegan J, Brooks DJ, Schwab KJ, Melendez-Torres GJ. Measurement in the study of menstrual health and hygiene: A systematic review and audit. PloS one, Jun. 4, 2020; 15(6): e0232935.
- Christ JP, Cedars MI. Current guidelines for diagnosing PCOS. Diagnostics, Mar. 15, 2023; 13(6): 1113.
- 12 Murina F, Lubrano C, Cappelli E, Campo M, Taraborrelli S. The role of female intimate hygiene practices in the management of vulvovaginal candidiasis: A randomized, controlled open-label trial. Health Care for Women International, May 4, 2023; 44(5): 689-700.
- 13 Chernova NI, Zadorozhnaya IS, Proskurina MI. Intimate hygiene in patients with genital itching and dryness. Obstetrics and Gynecology, 2023; 12: 190-6.
- 14 Dar MA, Maqbool M, Gani I, Ara I. Menstruation hygiene and related issues in adolescent girls: A brief commentary. International Journal of Current Research in Physiology and Pharmacology, Feb. 11, 2023; 1-5.
- 15 Pao PS. Social Stigma Centred around Menstruation: A Reflective Review. Frontier Anthropology, Feb. 2023; 11: 51-8.
- 16 Shaffer KM, Turner KL, Siwik C, Gonzalez BD, Upasani R, Glazer JV, Ferguson RJ, Joshua C, Low CA. Digital health and telehealth in cancer care: a scoping review of reviews. The Lancet Digital Health, May 1, 2023; 5(5): e316-27.
- 17 Mattson JM, Roth M, Sevlever M. Personal hygiene. Behavioral health promotion and intervention in intellectual and developmental disabilities, 2016; 43-72.
- 18 Kagan SH, Holland N, Chalian AA. Sexual issues in special populations: geriatric oncology–sexuality and older adults. InSeminars in oncology nursing, May 1, 2008; 24(2): 120-126. WB Saunders.
- 19 Mishra DK. Awareness of Consumer Rights and Responsibilities in India: Prospects and Challenges. Indian JL & Just, 2018; 9: 39.
- 20 Lane B, Perez-Brumer A, Parker R, Sprong A, Sommer M. Improving menstrual equity in the USA:

perspectives from trans and non-binary people assigned female at birth and health care providers. Culture, health & sexuality, Jul. 31, 2022; 24(10): 1408-22.

21 World Health Organization. Reproductive Health. Pregnancy, childbirth, postpartum, and newborn care: a guide for essential practice. World Health Organization, 2003.