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Review Article

Intimate hygiene for women: expert practice points

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ABSTRACT

Intimate hygiene is an important health aspect of females in day-to-day life. The practices of intimate hygiene vary widely around the globe due to cultural and religious beliefs. Currently, professional recommendations are limited in advising the optimal hygiene practices. Inappropriate practices can be concerning with the possibility of the development of infectious complications. Regular use of hygiene practices can improve overall health and boost self-confidence in females. In this review, we provided our expert suggestions on the importance and standard practices that can be adopted by females worldwide for adequate and effective intimate hygiene.

Keywords: Intimate hygiene, Vulvovaginal infections, Menstrual care, Vaginal cleansing

INTRODUCTION

Vulvovaginal health is one of the essential aspects to women's overall health. Improving vulvovaginal health is needed to enhance self-perception, self-confidence and intimacy. In addition, intimate hygiene is essential to remove the factors that create vulnerabilities for genital infection. Globally, current practices of intimate hygiene vary widely and many practices differ as per cultural and religious beliefs. Evidence indicates many Asian countries still carry negative connotations and consider it a taboo topic, especially in younger generations.¹

Optimal cleansing practices for the female intimate area is a long-standing debate. Majority of women are underinformed or misinformed about appropriate female genitalia cleansing practices. Inappropriate hygiene practices can lead to untoward symptoms and may predispose to vulvovaginal infections.^{2,3} Nonetheless, external cleaning and intimate feminine hygiene is essential for unpleasant symptoms and supporting overall intimate health.⁴ There are limited professional recommendations for intimate female hygiene practices globally.^{5,6} However, none are existing in the Indian setting. In this review, we provided expert practice points for appropriate use of intimate hygiene practices for Indian setting.

Intimate hygiene-why?

The external female genitalia include the mons pubis, labia majora and minora, clitoris and perineum. These outer genitalia support physiological, sexual and reproductive functioning. The genitalia are protected from pathogenic infection by a complementary array of defences including skin coverage and mucus production. The genital skin is coated with a protective hydrolipid layer formed from sebum and sweat and is colonized by commensal bacteria and is buffered against injury by the hair cover. The physiology of the reproductive system is altered by steroid hormones produced during puberty, menstrual cycle, pregnancy, and menopause. The pH of the vagina fluctuates but is more acidic (pH 3.6 to 4.5) in women of reproductive age than in children or post-menopausal women.^{7,8} The acidic pH of the vulvovaginal region forms part of the innate chemical protection and a pH above 4.5 in women of reproductive age is often associated with inflammatory or infective conditions. Menstruation, pregnancy, and sexual intercourse can lead to changes in pH and have been associated with vulnerability to infection.⁷

Vaginal mucosa and intimate skin are colonized by varied bacteria flora. Some are commensal while others are transient. Lactobacilli are the major form of protective commensal bacteria in the vaginal mucosa and their growth is favored by high levels of estrogen. Lactobacilli limit the colonization of transient and pathogenic bacteria by producing antibacterial substances, hydrogen peroxide and lactic acid, which acidify the uppermost layers of the intimate skin.⁹ This causes the female genitalia to have a low pH, which provides both physical and chemical protection. The aim of intimate cleansing is to remove factors that can irritate or create vulnerabilities for genital infection.

Care of vulva

General measures

Cleansing of the external intimate area should be conducted once or twice daily and never extend to the internal compartments of the genitalia. Women should wash their hands thoroughly before cleansing their intimate area. The ideal cleansing practice includes irrigation with clean water. The use of an intimate wash specially designed for the genital area is useful in special situations. More vigorous cleansing with washcloths/loofahs have the potential to cause localized trauma and should be avoided. Cleansing must include the interlabial furrows between the labia minora and majora, and the clitoral prepuce.

The area should be dried carefully using a clean, dry cotton towel/tissue. To prevent the potential transmission of infection, women should not share towels. Avoid wearing panty liners or sanitary towels on a regular basis. Avoid colored toilet/tissue paper. Antiseptic liquid should not be used for daily cleaning of the vulva. Wearing loose-fitting cotton or silk undergarments is recommended. White or light-colored underwear is preferable as dark textile dyes may cause allergies. At home, it is preferrable to wear loose fitting clothes, and sleeping without undergarments. Fabric conditioners/antiseptic liquids are avoidable. Nails need to be kept trimmed.

External wash

The perineum and vulva are exposed to the external environment, and a non-soap cleanser/dedicated vulvar wash may be used.

Soaps

Bar soap is usually alkaline in nature or neutral. It may produce dryness and alter the skin pH, leading to an impaired skin barrier, making the vulva more prone to irritation and vulvitis, and should not be used for cleansing this delicate area. Avoid using soaps, shower gels, scrubs, bubble baths, deodorants as all of these may contain skin irritants.

Liquid soaps and cleansing solutions

Important ingredients in these soaps are lactic acid, glycerine, fatty acid salts that remove dirt from skin; Mild detergents help to dissolve grease and oils that are not easily removed with water alone whilst maintaining vulvar pH. Use of a specially designed, hypoallergic intimate wash is preferable. Liquid formulations are favoured as they avoid cross-contamination that can occur with soap bars. Intimate washes should ideally be slightly acidic (pH 4.2 to 5.6).

Non-soap cleansers

These cleansers have a pH balance which is neutral to acidic, matching that of the vulvar area. They are nonirritant, non-allergenic, and fragrance free. Lactic acidbased cleansing solutions are recommended only for external use and not for vaginal douching. They can be used as adjuvant therapy for genital infection or inflammation but not as treatment.

Wet wipes

The wet wipes contain mild surfactant, preservatives, antimicrobials, and fragrance. They may occasionally cause allergic/irritant contact dermatitis. Colored tissue papers should be avoided.

Odor control products

Products like feminine deodorant sprays, body splashes, fragrances and feminine suppositories are available. These have to be applied externally on or adjacent to female genitalia to absorb moisture, deodorize, neutralize or control odor. They may contain antimicrobial agents, astringents, and perfumes. There may be risks of irritation or sensitization.

Talcum powder

Some women apply talcum powder on genital area to absorb moisture. Modern products marketed specifically for feminine hygiene have replaced talcum powder with corn starch or baking soda. Some studies have suggested a slight increase in the risk of ovarian cancer with talcum powder use due to the talc which is contaminated with asbestos.^{10,11} Hence, should be avoided.

Vaginal douching

Regular douching practices may vary between women in different countries. It is the process of introducing liquids into the vagina for the purpose of cleansing. Homemade solutions such as water and vinegar are sometimes used. All such practices should be avoided. Vaginal douching can lead to PID, cervical carcinoma, increased chances of contracting STI including HIV infection and bacterial vaginosis, preterm delivery etc.¹² Hence it is not advisable for the purpose of feminine hygiene. Vaginal douching should only be used in clinical settings.

Clothing

Nylon underwear, tight fitting garments etc. can increase local friction, heat and moisture. Bacteria and yeast thrive in moist or damp places. Hence cotton underwear is preferred over synthetic materials as cotton is breathable and allows air to circulate around the external genitalia. Women who sweat easily or exercise should change damp clothes often. After bathing, the external genital area should be dried very gently with a soft towel without rubbing. Sleeping without underwear is preferable. Traditional Indian wear like sarees, skirts, petticoats, salwar are more "genital-friendly".

Specific recommendations for key life stages

Hygiene in childhood

The Caretaker should wash his/her hands before handling the child. The genitalia of the baby should be washed carefully with warm water from front to rear. After washing, the perineum, and buttocks should be carefully wiped with a clean, soft towel. This towel should not be shared by any other person.

Menstrual care

A daily bath is essential for cleanliness especially during menstruation. The genital area can be washed and dried inbetween the pad changes. Sanitary pads are worn externally, and tampons and menstrual cups are used internally. Cotton sanitary napkins produce less skin irritation. Sanitary pads should be changed frequently (every 6 to 8 hourly- more frequently if required) depending upon the amount of bleeding. Used pads should not be flushed in the toilet but should be wrapped in wastepaper and thrown in the special covered dust bins. Recently, menstrual cups made up of silicone are available for use during menstruation.

Disposal of single-use sanitary napkins creates a big problem to the environment. These may seem expensive to some. Hence reusable napkins made up of soft cotton cloth is a good alternative. They can be washed with soap and water and dried in the sun. This way they can be reused multiple times. Biodegradable sanitary napkins made up of bamboo shoots is a new addition to the basket. Period panties are the latest addition for menstrual care. These have the ability to soak and retain accumulated blood without leakage and can also be washed and re-used. Women and girls should consult their Gynecologist to get more information regarding these different protective devices to keep themselves clean and hygienic avoiding infection.

Menstrual cups: use during period

Since silicone cups are bacteria resistant, they don't need to be washed every time they are emptied. Simply rinsing it in the sink is enough to clean it out before reinserting. Initial rinse with cold water, followed up with a hot rinse is sufficient to disinfect it.

Menstrual cup: care between periods

Boil 3 cups of clean water on the stove. Submerge cup but make sure the cup isn't touching the bottom or sides of the pot. Boil for 5-8 minutes then drain the cup and let it air dry.

Storing menstrual cups when not in use

Most cups will come with a bag or pouch to store it in when not in use. If it did not come with one, any breathable pouch can be used. The cup needs to be protected from dirt and germs but should still have plenty of air circulation. Store the pouch in a cold, dry location (such as a vanity drawer) where the cup can properly dry out before your next use.¹³

Pre-coital care

During sexual intercourse, transmission of bacteria, secretions, sweat, menstrual blood, urine and fecal waste can occur from the external environment into the vaginal canal. Cleaning of the external genitalia should include the vulva, as well as the folds of the labia and the clitoris before coitus. Hands and nails should be kept clean and neatly cut for a safe sex play. Perfumes/ deodorants should not be used directly on skin before intercourse as they can cause allergic reactions.

Post-coital care

The perineum and vulva should be cleansed off secretions from front to back with clean water. Post coital douche is not recommended for fear of ascending vaginal infection. Disinfectants should be avoided. Passing urine after coitus reduces the incidence of urinary tract infections.

Care during pregnancy

Pregnant women are more susceptible to genital infections due to hormonal and immune system alterations. Regular cleaning of external genital organs with warm water and cleansers containing lactic acid is advisable. These cleansers maintain a physiological pH. They also enhance the skin's natural barriers. As they are non-teratogenic, they can be safely used in pregnancy. Use of a plain unperfumed intimate wash for the vulva or the outer part of the vaginal region is recommended. Avoid using a vaginal douche or washing the vaginal area with regular soaps and gels or heavily perfumed one - this wreaks havoc with the pH balance and good bacteria that keep the vagina healthy making one more susceptible to infections. The intimate wash for pregnant women must not contain strong perfumes and chemicals that could irritate the skin and affect the pH balance of the vagina and should be paraben and irritant-free.

Postpartum perineal care

Washing hands before and after each perineal care is recommended. The soiled pad should be removed from front to back and discarded in the waste container. Squeeze peri bottle (fill the bottle with cleaning warm water) or pour warm water or cleansing solution over perineum without opening labia. Ensure that the solution flow is from the front to the back. Dry the perineal area with dry tissue from front to back, and then discard it. Apply medicated spray, ointment or pad as directed. Do not apply perineal pad for one to two minutes (otherwise medication will be observed in pad). Apply the clean perineal pad from front to back, touching only sides and outsides of the pad to lessen the risk of infection. Do not flush the toilet until standing upright, otherwise, the flushing water can spray onto the perineum. Always perform perineal care after elimination (urination or defecation) or at least every 4 hours during Puerperium. Start at the front (area just under the symphysis pubis) and proceed towards the back (around the anus) to prevent contaminations from the anal area. The perineal pad should be changed regularly to prevent infection. If edema is present, apply perineal ice packs intermittently for the first 24 hours after birth. The ice pack should remain in place approximately 20 minutes and then removed for about 10 minutes before being replaced.14

Hygiene for post-menopausal and older women

After menopause, estrogen levels go down significantly leading to less glycogen content in vaginal epithelial cells which in turn lowers Doderlein's bacilli. Due to less production of lactic acid, the pH increases, predisposing to infection. Menopausal women have vulvovaginal atrophy predisposing to irritation and itching. Washing the intimate area with a good vulvar wash containing lactic acid is useful and gives a soothing effect. Postmenopausal women suffer urogenital symptoms such as vaginal dryness in 32%, pruritus vulvae in 10-17%, and dyspareunia and urinary urgency in 10%. Vaginal lubricants can be recommended for the symptomatic improvement of dyspareunia. Vaginal moisturizers can be offered for vaginal dryness and dyspareunia. Local estrogen therapy (ET) is the first line of management, the only contraindication being active estrogen dependent tumors. Lifestyle modification, bladder drill, and pelvic floor exercises are recommended for urinary incontinence.¹⁵

Mons pubis hair care-hair removal products

Vulvar hair removal is not a recommendation for vulvar hygiene. If the patient still desires it, one can consider options such as trimming with clippers, shaving, waxing, electrolysis, and laser hair reduction. Trimming, clipping, and shaving have few adverse effects as long as they are done carefully. The hair can be trimmed to few mms in length with a pair of scissors or electric trimmers. A razor trims hairs to the skin surface. A wet shave is recommended, using a non-soap cleanser, or a shaving gel. Care to not cut/nick the skin. Waxing is a process in which a sticky viscous material is applied, and then pulled off with the help of a cloth or synthetic material with a quick pull opposite to the direction of growth. The process is painful, and folliculitis is a complication to watch out for. Various lasers are available for hair reduction (Diode/Qswitched Nd:YAG/ IPL) The laser light targets the dermal papilla and the hair bulge. Burns, post-inflammatory hyper/hypo pigmentation are complications with untrained technicians. Multiple treatments are required to achieve a significant hair reduction of the area. Adverse effects of laser hair removal include blistering and burning of the skin with post-inflammatory hypo or hyperpigmentation. Electrolysis uses an electric current to destroy the hair root. Each hair is treated with either a needle epilator or a tweezers epilator. Adverse effects of electrolysis can include pain during treatment and scarring. This method has lost popularity in view of the availability of better and faster, less-painful options.

Expert practice points

Daily intimate hygiene is necessary for women of all ages in order to maintain general health. The delicate vulvovaginal skin and mucosa should not be exposed to environmental irritants or unsuitable hygiene products. When using a liquid cleanser, it should be a mild non-soap cleanser with an acidic pH between 4.2 to 5.6. Traditional bar soaps and bubble baths should be avoided due to their high alkaline pH and abrasive properties. Lactic acid-based liquids have been shown to improve skin homeostasis and can be used as an adjuvant therapy in specific conditions like infections and irritation. Vaginal douching is not recommended at any age due to its association with vaginitis and PID. Loose fitting undergarments made of natural materials like cotton and silk are recommended. Prolonged use of tight clothes is discouraged to avoid frictional damage and skin maceration of the genital area due to the lack of proper ventilation. Perfumes and deodorants should be best avoided. Menstrual care should include the use of reusable/disposable sanitary pads. Frequent changing is recommended. Use of menstrual cup or period panties is environmentally friendly. Gentle pre and post coital cleansing of the genital area especially the clitoris and the vulvar folds, from front to back is recommended with clean water. Removal of pubic hair is not essential for genital hygiene, but when practiced, should be based on safe and hygienic techniques. Trimming or clipping is preferred. Postpartum care should include frequent cleansing, drying and use of cotton pads as necessary. Dryness should be maintained over any sutures. Infant genital care requires the caretaker to wash his/her hands beforehand and use separate towels for children. The vulva and vagina are commonly affected areas for contact dermatitis and should be kept away from environmental irritants or certain hygiene products. Repeated and vigorous vulvar cleansing should be avoided. Patients experiencing symptoms of itching, burning, discharge, unpleasant odor should seek help from a vulvar specialist.

CONCLUSION

It is emphasized that vulva is the first line of defense against genital tract infections. However, intimate hygiene is not currently practiced widely in the Indian setting. As intimate hygiene is desirable for overall good health in women, practices may vary significantly because of cultural and religious practices. It is important to educate women about intimate hygiene and the use of appropriate products that can cause no harm and would not affect the microbial microflora. We strongly recommend following safe intimate hygiene practices for all Indian women.

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