



Review Article

A review of practices related to genital hygiene and its awareness in women

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ABSTRACT

Genital hygiene is a significant segment of women's reproductive health and the practices related to it vary worldwide depending on numerous factors. Improper hygiene of the genital area might incline the vulnerability to sexually transmitted diseases (including HIV) and other genital infections and morbidities. These infections can result in cervicitis, vaginitis, urethritis and trichomoniasis which have been related with serious pregnancy outcomes. Therefore, genital hygiene has a key role in preventing genital infections. But there is very little awareness about the correct and healthy hygienic practices among the adolescent girls and women. Access to correct and pragmatic information is an important prerequisite to hygienic practices. Women having better knowledge regarding genital hygiene are less vulnerable to genital infections and its consequences. The clinical pharmacist has a role to educate the females about correct hygiene practices and provide proper counseling to clear their myths, misconceptions and taboos related to menstruation.

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1. Introduction

The term "Hygiene" which is derived from "Hygieia", the Greek Goddess of health, cleanliness and sanitation, refers to practices associated with ensuring cleanliness and good health. Genital hygiene is a significant segment of women's reproductive health.¹ The genital hygiene practices vary worldwide and depend on the individual's socio-economic status, personal preferences, local traditions and beliefs, access to water and sanitation resources and guidance from health care professionals.² Improper hygiene of the genital area might incline the vulnerability to sexually transmitted diseases (including HIV) and other reproductive tract infections and morbidities.¹ Reproductive tract infections are important medical issues related with negative effects on sexual and family lives and have a tendency of inclining prevalence around the world. The

prevalence of these infections was found out to be 9.7% in women of reproductive age in northern India. The main factor found to be significantly associated with these infections was illiteracy.³ They are as of now among the most common causes that lead women to look for clinical consideration at obstetrics and gynecology polyclinics.⁴

Each year, around 100 million females around the world are exposed to reproductive tract infections including urinary tract infections among which 75% of them already have a history of a these infections. These infections can result in cervicitis, vaginitis, urethritis and trichomoniasis which have been related with serious pregnancy outcomes.¹ The main risk factors for these infections are pregnancy, poor hygiene, long-term antibiotic or steroid therapy, smoking and alcohol consumption, diabetes mellitus, systemic conditions like immunodeficiency, use of vaginal tampons, frequent sexual intercourse with multiple partners, delivery and abortion under inappropriate

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facilities, multiparity, contraception, malnutrition and low socioeconomic status.⁴

Adding more, poor hand-washing habits, vaginal douching, using contaminated towels for drying and not practicing genital hygiene after using the restroom may also lead to the genital infections. Furthermore, the types of the adsorbents used during menstruation, frequency of changing adsorbent/day and frequency of removal of genital hair are also critical factors for the same.⁴ Another contributing factor is keeping the genital area moist and using soaps, deodorants, anti-itch creams, vaginal suppositories, sprays or powders for intimate parts, which may reduce the acidity and disturb the vaginal micro flora.¹ Apart from these all practices, insufficient education and awareness, insufficient health services, marriage at early ages, absence of social security, taboos, extreme fecundity and incorrect applications to genital health also contribute to the causes of reproductive health problems in females.⁵ Due to the above mentioned factors, women often manage their genital hygiene (including menstrual and pre and post-coital hygiene) with methods that could be unhygienic or inconvenient.

Genital infections which are highly relevant to poor genital hygiene management are bacterial vaginosis (BV) and vulvovaginal candidiasis (VVC). These two diseases have been associated with an inclined risk of HIV infection and human papilloma virus infection amongst others.⁶

Although, studies have associated unhygienic intra-vaginal practices to greater susceptibility to both BV and HIV but little is known about how this potential biological vulnerability occurs.¹ WHO (2015) raised a concern about whether vaginal practices could have harmful effects like increased vulnerability to reproductive tract infections and then recommended that more evidence is required to confirm a correlation between them, so that these harmful practices could be discouraged through health education and awareness messages for prevention.⁷ Early detection of vaginal infections, starting an appropriate treatment and taking necessary precautions are essential in protecting and improving women's health. Genital hygiene has a key role in preventing genital infections.⁴ But there is very little awareness about the hygiene practices among the women.⁸ Women having better knowledge regarding genital hygiene are less vulnerable to genital infections and its consequences.

2. Genital Hygiene Practices

2.1. Menstrual hygiene practices

Menstruation is considered as impure or dirty and the menstruating women are considered as unhygienic in the till date. It is strongly related with misconceptions and taboos. The menstrual hygiene is an insufficiently acknowledged issue in many developing countries. Many studies have

confirmed that safe and hygienic menstrual practices make women less vulnerable to reproductive tract infections.⁹ Menarche is a milestone in a girl's life but lack of knowledge and information for its preparedness and management ultimately leads to poor perception of hygienic practices during that phase.¹⁰

Studies reveal that around only 30% of the studied population of adolescent girls were aware about the menarche and its management beforehand.^{9,10} Mainly mothers and sisters were the sole providers of information about menarche and menstrual hygiene management.⁹⁻¹¹ Moreover, majority females face a lot of religious, cultural and social restrictions during menstruation like avoiding going to kitchens, temples, family functions, touching things at home, restricting daily activities, staying at home, absenteeism from schools etc.¹⁰⁻¹³ Using sanitary pad or napkin over reusable cloth during periods crucially determines genital hygiene but approximately half of the studied populations use cloth over sanitary pad during menses, among which most reuse that cloth after washing with soap and water. The place for drying these reusable clothes was mainly found out to be indoors or in dark places due to privacy concern.^{1,9-13} Thus, these practices make these women more prone to genital infections due to microbial harbouring.¹² The reasons for not using sanitary pads were mainly due to their unaffordable price, low availability in rural areas, shyness and restricted advice from mothers.¹² Sanitary pads were more commonly used among women with better economic status and education.^{9,12} Around, 3/4th of the females were not following hygienic practices and only 8.5% consulted doctors on acquiring any menstrual related problem.^{9,12} Furthermore, a study revealed that around 60% of the females used perfumes to overcome malodor during periods.⁴ The frequency of changing sanitary pads or cloth was reported out to be 2-5 times/day in 50% of the population.^{1,4} Most of the women bathed daily and washed their hands after using restroom during menstruation.⁴

2.2. Pre and post coital hygiene practices

A case-control study, conducted on 200 females at outpatient gynecological and family planning units affiliated to Zagazig University Hospitals, revealed that infected women were less likely to practice pre and post-coital hygiene and used chemical substances/lubricants during sexual intercourse.¹ The use of petroleum jelly as a vaginal lubricant was associated with an increased prevalence of BV associated bacterial morphotypes. In contrast, use of saliva as a lubricant was not related with significant changes in the prevalence of these morphotypes. Thus, different vaginal practices may have different effects on the vaginal flora.¹⁴ The composition of the vaginal micro flora depends on intrinsic factors such as age, hormonal changes and infections; and extrinsic factors like hygiene practices,

sexual intercourse, hormonal replacement therapy etc.² Women who had contraceptive history of using IUDs (Intra-Uterine Devices) were reported to be diagnosed with BV more frequently.¹⁵

Routine vulvar washing is healthy to prevent accumulation of vaginal discharge, urine, sweat and fecal contamination in order to prevent foul body odor.² But vaginal washing or douching is an unhealthy practice and increases the chances of genital infections.¹⁶ Above mentioned study also revealed that majority of these women practiced vaginal douching and had sexual intercourse more than 2 times a week.¹ The rate of douching was higher in housewives as compared to the employed women.¹⁶ The educational level was higher for women in the non douching group.¹⁷ Most commonly water was used for douching, second commonly used product was soap with water and third commonly used were the cosmetic products.¹⁷ Soaps, detergents and antiseptics used to douche can cause chemical damage and increase vaginal pH, encouraging the growth of microbes.¹⁸ Vaginal dryness, burning and severe itching in the vaginal area, urinary infections have been reported in women who douche frequently.¹⁷

2.3. Underwear and toilet hygiene practices

Various underwear and toilet hygiene practices determine the vulnerability of getting genito-urinary infections. Studies reported that around 3/4th of the population generally used cotton/hosiery underwears.^{4,5,12,16} A case-control study revealed that women who used synthetic and nylon underwears were more prone to vaginal infections as compared to those who used cotton ones.¹ So, synthetic or nylon based underwears should be avoided as they do not absorb perspiration, causing the perineum to remain humid, thus making it favorable for microbial growth.⁴ The frequency of changing the underwear was observed out to be daily in about 50% of the studied population while the remaining females changed them in 2 to 3 couple of days.^{1,4,5,16} The bathing frequency was found out to be daily or once in 2 days in majority of the study groups.^{4,16}

Moving further, 60-70% of the population washed their genital area regularly with water and soap, while few of them used cosmetics for washing.^{4,5,12} It has been described by the studies that incorrect perineal hygiene practices (i.e. back to forward) may lead to higher incidence of infections due to the transfer of microbes from the anus to the vagina.^{1,4} Approximately, 70% females practiced the incorrect perineal hygiene.^{4,16} After cleaning, drying of the genital area is also necessary to avoid humid conditions. Studies reported that around 80% of the women dried their genitalia after using toilets.^{4,16} The literature describes that frequent use of razors and hair removal creams may cause microscopic cuts on the skin, providing a favorable environment for the growth of microbes.⁴ Less than half of the population removed pubic hair monthly or once in two

months.^{4,16}

2.4. Awareness regarding genital hygiene practices

A large number of studies show that women are not aware of correct genital hygiene practices and have huge a knowledge gap that makes them unprepared for the serious consequences.^{1,4,5,8} Access to correct and pragmatic information is an important prerequisite to hygienic practices.¹⁹ There is no doubt that the Govt. has initiated many awareness programmes, policies and schemes for good menstrual hygiene management, subsidized sanitary napkins are being provided to women at affordable prices, proper washing and sanitation requirements are being facilitated at schools and even toilet facilities are being provided at rural places.^{19,20} Despite of the numerous programmes, prevailing socio-cultural beliefs, and practices make it difficult for women to talk freely about genital hygiene without fear or shame.¹⁹ So, there is a need for the evaluation of the existing ongoing programmes to have a deep insight into the crucial gaps that need to be filled and modified. More training programmes on genital hygienic practices must be initiated. Family members and the community should all be counseled regarding menstrual physiology and genital hygiene.²⁰ Both boys and girls should be educated from the very basic level about the menstruation and hygienic practices to enhance the effectiveness of the programmes.¹⁹ Apart from awareness, other issues that need to be looked in are interventions to break the myths and misconceptions; sustainable solutions to manufacture and distribute low-cost but high quality sanitary napkins as well as their regular availability; innovative and environmental-friendly disposing infrastructure for menstrual waste.¹⁹

2.5. Role of clinical pharmacist in genital hygiene practices

Knowledge and awareness regarding the factors that can determine genital hygiene practices is very crucial for its effective management. The main role of the clinical pharmacist is to educate the females about correct hygiene practices² and provide proper counseling to clear their myths, misconceptions and taboos related to menstruation.²¹ His role extends to educate them regarding what menarche is, what menstrual cycle is and how to deal with it. He must also provide information about pain management during menstruation. Proper knowledge, if provided to men, may push them towards helping their mothers, sisters, wives, students etc in practicing good hygiene. Awareness camps can be organized and conducted by the pharmacists regarding good hygiene practices.²¹ Some women who encounter genital infections, self-diagnose and self-medicate,^{22,23} which may lead to recurrent infections,²² due to resistance to administered

over-the-counter drugs. Due to lack of information and awareness, they may take antifungals for bacterial vaginosis. So, here comes the role of the pharmacist to guide and counsel those self-medicating females about the proper use, administration frequency, indications, side effects of the medicine to prevent resistance and any future complications.

3. Conclusion

In a nutshell, it can be concluded that different types of genital hygiene practices are seen among women dependent on various factors discussed. The women who practiced good practices were less prone to genital infections. Good hygiene boosts health, self-esteem and confidence of women and is linked to gender equality and basic human rights. It should be the top developmental priority of the country to change the current scenario. Principles of correct genital hygiene are not adequately known among the females; therefore more awareness programs are required on this topic to overcome the current hurdles. Lastly, majority studies had small sample size and were mainly based on self-reporting by women; also they were performed in limited number of countries; so these limitations could be looked upon for future studies.

4. Conflict of Interest

The authors declare that there are no conflicts of interest in this paper.

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None.

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