RESEARCH PAPER

Prevalence and Practices of Women of Reproductive Age on Genital Hygiene Practices in selected Community area of Punjab

Aneeta Sharma[1] Dr. Kiranjeet Kaur[2]

[1]*PhD Scholar Chitkara School of Health Sciences, Chitkara University, Rajpura Punjab,* aneetasharma.phd2020@chitkara.edu.in

[2]*Associate Professor Chitkara School of Health Sciences, Chitkara University, Punjab,* Kiranjeet.kaur@chitkara.edu.in

ABSTRACT

Background: Reproductive Tract Infections (RTIs) represent a significant yet often underreported public health problem, especially among women in rural and underdeveloped settings. Reproductive health care for women of reproductive age has received increasing attention through various maternal and child health programmes in India. Despite these efforts, the burden of propagative swathe impurities among females aged 15–49 years continues to rise, particularly in rural areas where limited awareness, inadequate health facilities, and sociocultural barriers persist. ASHAs play a crucial role in health education, disease prevention, promotion of healthy practices, community mobilisation, and timely referral to health services. **Methodology:** A quantitative quasi-experimental research design was adopted. A structured questionnaire was developed to assess the genital hygiene practices and prevalence of RTIs symptoms among women of reproductive age. The study included sample of 450 women of reproductive age by convenience sampling from selected community area. In this study a pre-test was conducted to assess prevalence of RTIs based on symptoms. A study pre-test was conducted to assess genital hygiene practices by using checklist. Post-test was conducted twice later to evaluate retention and sustained practices changes. **Results:** The study found the statistically significant improvement in genital hygiene practices due to behavioural changes observed in between pre-test and post-test (7.200; $p< 0.001$) pre-test 57.69 ± 5.740 to post-test 79.07 ± 4.598. **Conclusion:** The education proved effective in enhancing by pre-trained ASHA workers, which directly translated into improved genital hygiene practices among women of reproductive age and reduction in symptoms of RTIs.

Keywords: RTIs; genital hygiene practices; reproductive health education; women of reproductive age.

How to cite this article: Sharma A, Kaur K. Prevalence and Practices of Women of Reproductive Age on Genital Hygiene Practices in selected Community area of Punjab. Int J Drug Deliv Technol. 2026;16(52s): 1105-1110. DOI: 10.25258/ijddt.16.52s.142

Source of support: Nil

Conflict of interest: None

INTRODUCTION

Reproductive tract infections (RTIs) represent a silent yet pervasive public health concern. RTIs often remain undiagnosed or untreated due to limited awareness, absence of routine screening, and reluctance to report symptoms. Many women may consider mild discomfort or abnormal discharge as non-serious conditions, failing to recognize the potential long-term consequences. Untreated RTIs can compromise reproductive outcomes, contribute to infertility, increase susceptibility to sexually transmitted infections, and elevate the risk of adverse pregnancy outcomes. Chronic infections may also result in pelvic inflammatory disease and persistent pain, thereby diminishing quality of life and functional capacity. Many women may normalize symptoms such as abnormal discharge, itching, or pelvic discomfort, failing to recognize them as indicators of infection. Social stigma and embarrassment further discourage open discussion and timely consultation. Factors such as illiteracy, poor genital hygiene practices, unhealthy lifestyles, gynaecological and obstetrical conditions, and deeply rooted traditional beliefs place Indian women at a higher risk of acquiring RTIs (1).

The stigma associated with reproductive health issues further exacerbates the problem. Women may feel embarrassment or shame in discussing intimate symptoms, particularly in communities where reproductive health remains a taboo subject. Limited awareness regarding the causes, prevention, and treatment of RTIs contributes to misconceptions and normalization of preventable conditions. (2) Restricted mobility—whether due to cultural norms, household responsibilities, or financial limitations—

adds another layer of difficulty in accessing care. Together, these factors create an environment in which RTIs continue to pose a substantial threat to women's health, particularly among rural and socially disadvantaged groups. Factors such as poor menstrual hygiene, unsafe delivery practices, lack of awareness regarding personal cleanliness, and delayed treatment contribute to high prevalence rates (3).

Reproductive well-being constitutes a vital dimension of overall health and serves as a foundational pillar for sustainable human development. It is not limited to the mere absence of disease or infirmity; rather, it encompasses a comprehensive state of physical, psychological, and social well-being in all matters related to the reproductive system. In this broader context, reproductive wellness emerges not merely as a personal or family concern but as a critical public health priority with far-reaching implications (4) For societal progress. Public health frameworks increasingly recognize that achieving sustainable development goals is intrinsically linked to improving women 's health indicators. Reproductive health intersects with issues such as gender equality, poverty reduction, education, and social empowerment. When women are informed, healthy, and supported in managing their reproductive health, communities become more resilient and capable of sustainable growth. (5)

In this context, "Accredited Social Health Activists" (ASHAs) serve as the first point of contact for rural and underserved populations Within the Indian public health architecture, Accredited Social Health Activists (ASHA) represent a pivotal human resource in delivering community-based healthcare. Operating under the framework of the National Health Mission, ASHA workers are trained female community health volunteers selected from within the communities they serve. Their unique positioning enables them to function as a critical interface between rural households and the formal healthcare system. (6) They facilitate access to essential health services, mobilize communities for immunization and maternal care programs, provide counselling on family planning, and promote preventive health practices. Educational interventions led by well-trained ASHAs can play a transformative role in addressing these challenges. By raising awareness regarding genital hygiene practices—such as regular washing with clean water, proper menstrual hygiene management, use of clean absorbents, and safe sexual practices. Moreover, they can encourage women to seek medical attention promptly when symptoms arise, thereby preventing complications such as infertility, chronic pelvic inflammatory disease, and adverse pregnancy outcomes.

In summary, reproductive well-being is a multifaceted and indispensable component of overall health and sustainable development. Women 's reproductive health significantly influences maternal and child outcomes, economic productivity, and societal advancement.

OBJECTIVES OF THE STUDY

1. To find the effectiveness of training by ASHA workers on genital hygiene practices of women of reproductive age post training.
2. To find the prevalence of RTIs based on symptoms among women of reproductive age.

METHODOLOGY

Research Approach: A Quantitative research approach was used

Research Design: Quasi Experimental (Pre-test Post-test design)

Setting of the study: The current study was conducted in the selected community area of Ludhiana, Punjab

Population: Women of reproductive age

Target Population: Women of reproductive age in selected community area

Sample size: 450 women of reproductive age

Tools and Techniques of Data Collection

PART	TOOLS	TECHNIQUES
1.	Sociodemographic profile (Women of reproductive age)	Self-reported
2.	Structured questionnaire to assess the practices related to genital hygiene among women of reproductive age	Pen and paper
3.	Structured education session by ASHA workers	Lecture cum discussion method
4.	Structured questionnaire to find the prevalence of RTIs based on symptoms	self-reported

Ethical consideration:
The ethical clearance was secured from IHEC (IHEC/DHR/CU/PB/23/137). Informed consent was acquired from the study participants, and they were made aware of their confidentiality rights as well as their option to withdraw consent at any time.

RESULTS AND INTERPRETATION
SECTION 1

Description of selected demographic variables of Women of reproductive age

This section describes the selected demographic variable in terms of age, education, marital status and Income (Family) of women of reproductive age. The frequencies and percentages of the chosen demographic characteristics. The calculated values are presented in Table 4.1.

Table 4.1:Frequency and Percentage distribution of socio-demographic variable of women of reproductive age
N =450

S. No	Demographic Variables	Category	n	f (%)
1	**Age (in years)**			
I		15-20	9	2.0%
II		21-25	49	10.8%
III		26-30	95	21.1%
IV		31-35	68	15.1%
V		36-40	93	20.7%
VI		41-45	127	28.3%
VII		46-50	9	2.0%
2	**Education**			
I		Primary	209	46.4%
II		Secondary	238	52.9%
III		Higher education	3	0.7%
3	**Marital status**			
I		Single	2	0.4%
II		Married	444	98.7%
III		Divorced/separated	2	0.4%
IV		Widow	2	0.4%
4	**Income**			
I		Less than 1 lakh	450	100.0%

Table 4.1 presents the frequency and percentage distribution of demographic factors among women of reproductive age. The data indicates that 28.3% of women of reproductive age are within the 41- 45 years age group. A majority of women of reproductive age (52.9%) attained primary schooling. The majority of women (98.7%) were married. The income status of all women (100.0%) was below 1 lakh.

Hence, women of reproductive age characterized by advanced age women with low educational status.

SECTION II

Table 4.2: Comparison level of practices regarding genital hygiene in pre training and post trainings among women of reproductive age **N=450**

Level of Practices	Score Range	Pre- test	1 Post-test	2 Post-test
Low	21-41	389(86.4%)	0 (0%)	0 (0%)

Moderate	42-62	61 (13.6%)	0 (0.0%)	0 (0.0%)
Good	63-84	0(0%)	450 (100.0%)	440 (100.0%)

Minimum score = 21
Maximum score = 84

Table 4.2 illustrates the genital hygiene routines among women of reproductive age. The distribution indicates that 100.0% of women of reproductive age achieved a good level of genital hygiene practices following post-practice tests 1 and 2, with 0.0% demonstrating this good level in the pre-test. Prior to training, 86.4% exhibited a low level of knowledge, while 13.6% were classified as having a moderate level of practice in the pre-test, 0.0% post-test 1, and post-test 2 assessments. In contrast, 100.0% attained a good level in both immediate post-practice test 1 and one month after post-practice test 2 (10 women were not participated in post-test 2).
Hence forth, genital hygiene practices improved after the intervention among women of reproductive age.

Analysis of dependent variables through Mean, Median, and Standard Deviation comparisons.

Table 4.3: Mean and median practices score of women of reproductive age related to genital hygiene practices N=450

Group	Score Range			Mean ± S. D			Median		
	Pre-test	Post-test 1	Post-test 2	Pre-test	Post-test 1	Post-test 2	Pre-test	Post-test 1	Post-test 2
Women of reproductive age n = 450	44-79	58-84	66-84	57.69±5.740	79.89±4.765	79.07±4.598	58	81	79

Table 4.3 illustrates the score range, mean, median, and standard deviation of practice scores recorded by women of reproductive age before and after the training assessment. The score ranged from 44 to 79 prior to training and then decreased to 58 to 84 following the instruction of women of reproductive age by ASHA personnel. The mean and standard deviation changed from 57.69±5.740 in the pre-test to 79.89±4.765 in post-test 1 and 79.07±4.598 in post-test 2 following training of women of reproductive age. The median pre-test score was 58, whereas the post-training scores were 81 and 79, respectively

Table 4.4: Comparison between pre-test practices test, post-test 1 practices test and post –test 2 practices test

Genital Hygiene Practices	Test Statistic	Standard Error	Z-value	p-value
Pre-test Total Score-Post-test 2 Total Score	-1.223	.067	-18.350	<0.000*
Pre-test Total Score-Post-test 1 Total Score	-1.703	.067	-25.550	<0.000*

Post-test 2 Total Score-Post-test 1 Total Score	.480	.067	7.200	<0.000*

Table 4.4 shows all the comparison of women of reproductive age, before and after receiving education regarding genital hygiene practices to prevent RTIs. In non-parametric test applied, negative Z-value (-18.350) in pre-test and post-test 2, -25.550 in pre-test and post-test 1, 7.200 positive Z-value between post-2 and post-test 1 indicates a relative decrease, though practices remained statistically significant at 0.05 level of significance (p< 0.00).

SECTION III

Table 4.5: Comparison of RTIs symptoms before and after intervention among women of reproductive age N=450

Symptoms of RTIs	Before (%age)	After (%age)	%age (Change)
Abnormal excessive vaginal discharge	37.7	31	-6.7
Foul smell	28.2	23.75	-4.45
Colour change in discharge	11.2	21.5	+10.3
Itching in vulva area	29	25.75	-3.25
Discomfort and back pain	36.7	26.7	-10.0
Difficulty while passing urine	18	5.5	-12.5
Burning sensation during urination	23.7	15	-8.7
Lower abdominal pain	38.5	26.5	-12.0
Pelvic pain	53	47	-6.0
Pain during intercourse	45	62	+17.0
Painful menstruation	41.5	36	-5.5
Spotting of blood after intercourse	18	8	-10.0
Genital ulcer	4.5	2.75	-1.75
Swelling in groin area	32.2	37	+4.8

Table 4.5 depicts that most symptoms decreased after teaching, showing that genital hygiene education was effective in reducing RTI prevalence. The data shows the largest improvements in difficulty urinating (↓12.5%), lower abdominal pain (↓12%), spotting after intercourse (↓10%). Few symptoms increased (colour change, pain during intercourse, groin swelling), likely due to greater awareness and willingness to report after education rather than worsening health.

This shows the impact of ASHA knowledge on genital hygiene improved genital hygiene practices and reduced severe RTI symptoms.

Henceforth, the symptoms of RTIs reduced after intervention.

CONCLUSION

The findings highlight the effectiveness of systematic, community-based educational programs in preventing reproductive tract infections and promoting reproductive health. The research reaffirms that grassroots health workers are pivotal in translating health policies into practical behavioural changes at the community level.

ACKNOWLEDGMENT

I would like to express my heartfelt gratitude and thanks to my Guide **Dr Kiranjeet Kaur** Associate Professor, Chitkara College of Microbiology for her kindness, and valuable support over the period. Her omnipresence, her leadership and her eternal inspiration made me complete this immense task. I thank her for her untiring guidance and continuous motivation in my thesis. Her presence made my journey in PhD program easy and interesting. I admire her commitment to her students. I thank God for giving me her as a guide for my PhD program.

REFERENCES

1. Tohit NF, Rashid SA, Fakuradzi WF, Zaidi NA, Haque M. Exploring pathways from community involvement to empowerment in sexual and reproductive health: a public health perspective. Adv Hum Biol. 2024;14(4):296-307.
2. Jabir M, Choolayil AC. Social work with populations vulnerable to neglected tropical diseases: evidence and insights from India. Cham: Springer Nature; 2024.

3. Barua A, Chandra-Mouli V. The Tarunya Project's efforts to improve the quality of adolescent reproductive and sexual health services in Jharkhand state, India: a post-hoc evaluation. Int J Adolesc Med Health. 2016;29(6):20160024.
4. DeJong J. Capabilities, reproductive health and well-being. J Dev Stud. 2006;42(7):1158-79.
5. Wang GZ. The impact of social and economic indicators on maternal and child health. Soc Indic Res. 2014;116(3):935-57.
6. Kumar R, Malhotra MD. Unrecognized pillars of public health: the struggles of ASHA workers in India. Vasc Endovascular Rev. 2025;8(15s):116-26.