



A STUDY TO ASSESS THE SKIN CHANGES OF WAIST AND KNOWLEDGE ON PETTICOAT-RELATED SKIN CANCER AMONG WOMEN IN AMRITAKUNDU, MURSHIDABAD, WEST BENGAL.

Nursing

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ABSTRACT

Introduction: The saree, a traditional garment worn in woman of south East Asia, is found as a source of skin cancer when tied tightly with a petticoat around the waist. Though the prevalence of petticoat related skin cancer is not very high but risk group is large with limited awareness. The study aimed to assess waist skin changes and knowledge regarding petticoat -related skin cancer among women of Murshidabad, West Bengal.

Methodology: A descriptive survey was conducted among 150 rural women aged 18 years and above who regularly wear sarees. Convenience sampling was used to select participants. Data were collected by socio-demographic profile, observation checklist and structured knowledge questionnaire. Data were analyzed using descriptive and inferential statistics. **Results:** Out of 150 rural women, 57% show mild skin changes, and 1% showed severe changes around the waist. Participant's knowledge score was ranged from 9 to 18 with a mean of 13.37 ± 2.03 . Among rural women 94% had never heard petticoat related skin cancer. Significant associations were found between knowledge level and marital status, occupation, petticoat type, and family history of skin cancer.

KEYWORDS

Petticoat Cancer, Waist Skin Changes, Squamous Cell Carcinoma, Saree Cancer, Womens Health, Rural West Bengal.

INTRODUCTION

Petticoat cancer, also known as Marjolin's ulcer, is a rare form of skin cancer that develops around the waistline in individuals who wear tightly tied saree underskirts petticoats or dhotis. According to the report of world health organization (WHO) worldwide total two crore people were affected by the cancer in the year of 2022 and more than 14 lakhs in India; among them more than 9 lakhs Cancer affected people were died (Khalonkar .S.S, Bai S; 1945). According to experts, the constant friction and pressure from the tightly tied waist cords can lead to chronic skin irritation, pigmentation, ulceration, which can eventually progress to squamous cell carcinoma. Though the incidence is less but 70% women of India wearing saree for which a large portion are at risk. Cancer is a life-threatening disease which has high mortality. In India mortality related to cancer is 67.2 per 100,000 due to late diagnosis. In a hospital based study of West Bengal reported that out of 10,400 registered cases of cancer 54% were male and 46% were female (Copcu.E; 2003).

Raising awareness about this issue is crucial for early detection and prevention. Regular skin checks and prompt medical attention are essential for anyone experiencing chronic skin irritation in the waist area. (Patil A.S; 2005)

METHODOLOGY

A descriptive study was conducted in rural community of Murshidabad, West Bengal. A total 150 adult women, aged 18 years or above were selected through convenience sampling technique. Participants were included, who regularly used Saree and willing to

participate. To collect relevant data 3 tools sociodemographic profile, structure knowledge questionnaire and observation checklist was used after validation and reliability test.

RESULT

Among 150 rural women 62(41.33%) were in the age group of 20-39 years; and 65(43.33%) in the age group of 40-59 years and only 15.33% were present 60-85 years in the age group. Among the participants 39.33% had primary level of qualification and 3.33% had graduation and above qualification. Majority (91.33%) were homemaker and 1.33% were others workers. Majority of participants (86%) were married but 4% participants were unmarried or separated but 10% were widow. Majority of participants wearing saree for 11-40 years and only 12.67% were wearing saree for longer duration that is 41-70 years 19(12.67%). Out of 150 participants 147(98%) were using cotton and 1.33% women were using mixed petticoat. Adult women knowledge score on petticoat related skin cancer was ranged from 9 to 18 with a mean 13.37 ± 2.03 .

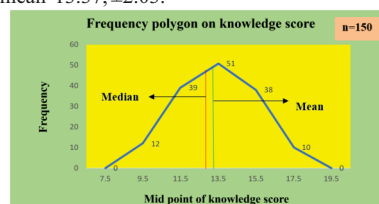


Fig 1: Frequency Polygon on Knowledge Score

Fig -1 shows the frequency polygon on knowledge score of petticoat related skin cancer. The mean (13.36) and median (13) lie close to each other and mean is greater than median ;lie at the right of the median which indicate that the scores were positively skewed (0.53).

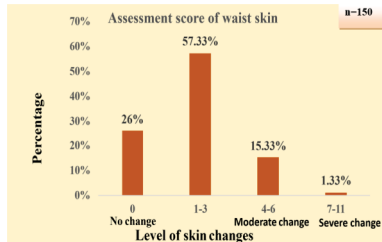


Fig 2: Assessment of Waist Skin Changes

Figure 2: showing level of skin changes on waist area of woman. Out of 150 participants, no changes was observed among 26% of women, mild, moderate and severe changes was observed in 57%, 15% and 1% of women. Significant associations were found between knowledge and marital status, occupation, petticoat type, family history of cancer.

DISCUSSION

In the present study, only 7.33% of participants were aware of petticoat-related skin cancer, indicating very low public awareness in the rural population of Murshidabad. The mean knowledge score was 13.37, which demonstrates inadequate awareness. This aligns with the findings of Altunkurek SZ and Kaya E (2019), where 53.7% of parents lacked knowledge about skin cancer, and the mean score was 13.16 ± 3.03 . Similarly, Mahmood A et al (2021) reported that only 10.2% of their study participants in rural Pakistan were aware of skin-related risks associated with tight or synthetic clothing, reflecting a general lack of awareness in low-resource settings. In contrast, a study by Patel T et al (2020) in urban Gujarat reported higher awareness (39%) due to better access to media and health education. This contrast highlights the role of education, urbanization, and health communication in shaping awareness.

In the present study, waist skin assessment revealed various levels of skin changes, such as hyperpigmentation, irritation, and mild lesions, particularly among those wearing tightly tied sarees for extended hours. This is consistent with a clinical study by Eapen B, Shabana S, and Anandan S (2015), which documented that 70% of saree-wearing Indian women developed waist dermatoses, with hyperpigmentation and scaling as the most frequent presentations. A study by Ghosh S et al (2018) on textile dermatitis among saree-wearing women in Bengal also found waist and hip regions as common sites for skin lesions, caused by tight elastics, friction, and synthetic material. Another study by Rani R et al (2020) observed that women who wore sarees more than 8 hours a day had a significantly higher incidence of skin erosion and secondary bacterial infections. These findings affirm that continuous friction, sweating, and poor hygiene around the waistline contribute to skin issues, especially when safety measures (like proper fabric and fitting) are ignored.

Present study found statistically significant associations between knowledge level and variables: occupation, marital status, type of petticoat, and family history of skin cancer. This observation is supported by a study by Laishram RS et al (2010), which found that education level, occupation, and family history significantly influenced awareness and early detection of skin malignancies. Similarly, Thompson SC et al (2017) reported that women with a family history of skin cancer were more likely to seek screening and had better preventive knowledge. Ganguly S et al. (2014) noted that socio-demographic factors such as occupation and media exposure were significant predictors of awareness and timely skin cancer diagnosis in West Bengal.

The study is confined to a selected community in Murshidabad, which may not be generalizable to other regions which different lifestyle, or socioeconomic conditions. To overcome these limitations, further study can be conducted at multiple setting and involving large sample. Petticoat - related skin cancer is a relatively under- researched or rare topic, so existing literature to support findings may be limited, affecting the study's depth and credibility, skin changes could be caused by multiple factors (e.g. hygiene, tight clothing, heat, obesity diabetes), not just petticoat use. Therefore comparative study and true experimental study can be conducted. Early skin changes are common,

but awareness is lacking. Nurses are educators should prioritize community - based awareness and regular screening for women.

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