

A Survey on Practice of Hygiene and Knowledge About Menstruation in Women of Pithoragarh, Uttarakhand, India

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ABSTRACT

Background: The Uttarakhand, India, is having many remote areas where traditional values are practiced in the society during menstruation. A structured study would help to understand the menstruation related traditional practices. **Objective:** To study the prevalent practice of hygiene, social taboos, and knowledge about menstruation (KAM) in young females, aged 18 to 25 years, living in the remote area, Pithoragarh district of Uttarakhand. **Materials and methods:** Institutional Ethics Committee has approved the study. The volunteer subjects were recruited from different villages and colleges. Six hundred fifty subjects were approached to volunteer and 400 subjects, who met inclusion criteria and given consent. The KAM and hygiene related questionnaire [HRQ] were questionnaires, were administered with basic demographic information sheet. **Results:** Eighty-seven percent of females follow traditional restrictions and taboos during menses. About 52.75% experiencing regular menses, while 47.25% having irregular menses. About 65.25% of respondents were using sanitary pads, while 13% were using old cloth during menstruation. Seventy-two percent women did not know anything about menstruation before menarche. Almost all participants follow social restriction irrespective of their level of education. **Conclusion:** There are many outdated customs are still practiced by all sections of the society. There is a need of mass awareness to educate the young women about menstruation related taboos and practice of hygiene to have a healthy society.

Keywords: Menarche, menses, sanitary pad, taboos

Menstruation is regarded as the sign of fertility period during the reproductive ages of all women. The physiological changes that occur during reproductive ages matures an ovum in every month which is released during ovulation and unsuccessful fertilization of ovum results in shedding-off of old uterus wall tissues characterized by a bleeding 'period' or menstruation or popularly called as menses. Menstruation stops during successful pregnancy or menopause. The beginning of menstruation is called menarche and it continues until menopause. Usual age is of menarche is about 12 to 14 years and menopause,

cessation of menstruation, at the age of about 45 to 50 years.

Menstruation is a sign of active reproductive age and fertility period. However, bleeding during menstruation makes a woman vulnerable to various infections. The hormonal changes during menstruation causes physiological changes, which may result into behavioral changes collectively called as premenstrual symptoms such as mood swing, stress and related discomforts like abdominal pain, headache, body ache, etc, to name a few. The knowledge about menstruation (KAM) and practice of hygiene may reduce premenstrual syndrome to an extent. The menstruation related issues have been reported from India but also from other developing countries like Nepal, Egypt, and Nigeria^{1,2}.

Uttarakhand being a traditional society-based community, certain customs and traditions are being followed during menstruation. Some of the customs and traditions are outdated as per the modern day community-based understandings and practices. Young women should be made aware about the menstruation and practice of hygiene during menstruation. However,

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systematic study about the knowledge and practice of hygiene is wanting in the remote district Pithoragarh of Uttarakhand. Thus, the current study was undertaken to scientific evaluation of (KAM and practice of hygiene during menstruation among the young women of Pithoragarh district of Uttarakhand, India.

MATERIAL AND METHODS

The study was conducted in the eastern most district of Uttarakhand named Pithoragarh. This district is sharing its international boundaries with Tibet (China) and Nepal. This study was approved by the Institutional Ethic Committee, LSM Government Postgraduate College, Pithoragarh. The subjects were contacted to volunteer in the study. The volunteers were asked to give an informed written consent after initial briefing. Those who given the consent, were recruited on the basis of inclusion and exclusion criteria. The recruitment process and enrollment of subjects are shown in Figure 1.

After initial briefing about the study, subjects were asked to fill the sociodemographic details, KAM and hygiene related questionnaire (HRQ). Assistance was extended to fill the data in case of less educated volunteers or whenever they faced difficulty in the understanding. These in-house questionnaires were prevalidated in a small group of volunteers and modified accordingly before using it for the study. The subjects were recruited from Pithoragarh city, nearby villages up to 20 km radius from the district headquarters and college going students. A mass contact campaign was undertaken to approach the potential subjects through ASHA (Accredited Social Health Activist), village heads, Anganwadi workers, schools, and colleges.

The KAM questionnaires had questions about general KAM like 1) first reaction to menstruation, 2) kind of care to be taken during bleeding, 3) when pregnancy can be occur, 4) preventive measures to be taken to prevent sexually transmitted diseases, and 5) about emergency contraceptive pills. HRQ were structured to get the information about, 1) maintenance of hygiene, 2) following of social restrictions, 3) source of information regarding menstruation, 4) food restrictions and physical work, and 5) Taboos followed. The information gathered through questionnaires were statistically analyzed for a meaningful information on the basis of mean, standard deviation (SD), percentages and level of significance (p-value).

RESULT

The subjects volunteered for the study were aged 18 to 25 years and belonged to different socioeconomic

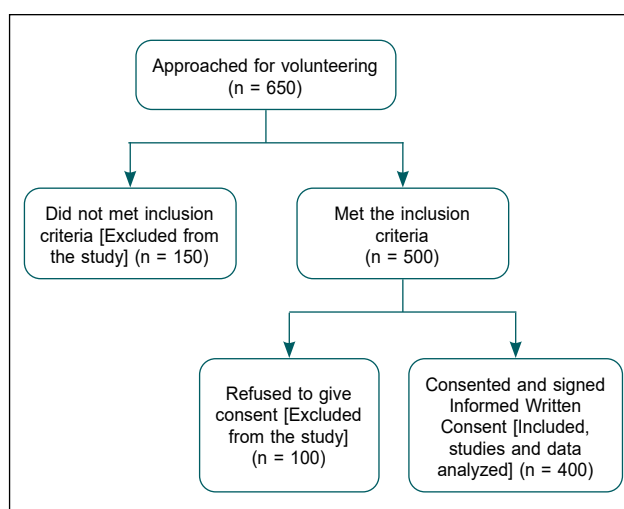


Figure 1. The recruitment process of volunteers.

Table 1. The Anthropometric and Sociodemographic Data

General demographic details (n = 400)

Age	21.31 ± 2.13 years (mean ± SD)
Height	158.24 ± 5.31 cm (mean ± SD)
Weight	49.11 ± 6.60 kg (mean ± SD)
BMI	19.58 ± 2.58 (mean ± SD)
Social category	<ul style="list-style-type: none">• General (65.25%)• Scheduled caste (25%)• Other backwards (09%)• Scheduled tribe (0.75%)
Marital status	<ul style="list-style-type: none">• Married (50%)• Unmarried (50%)
Educational status	<ul style="list-style-type: none">• Below high school (2.75%)• High school (13%)• Intermediate (34%)• Graduate (6.25%)• Masters (34.5%)• Professional (B.Ed) - 9.25%

SD = Standard deviation; BMI = Body mass index.

background. They had a diverse educational status. To assess the general awareness on menstruation and general hygiene practice, KAM and HRQ were administered in both married and unmarried subjects. Table 1 presents the basic anthropometric and socio-demographic characteristics of the study subjects.

KAM response showed that respondents are having knowledge of menstruation related information in the

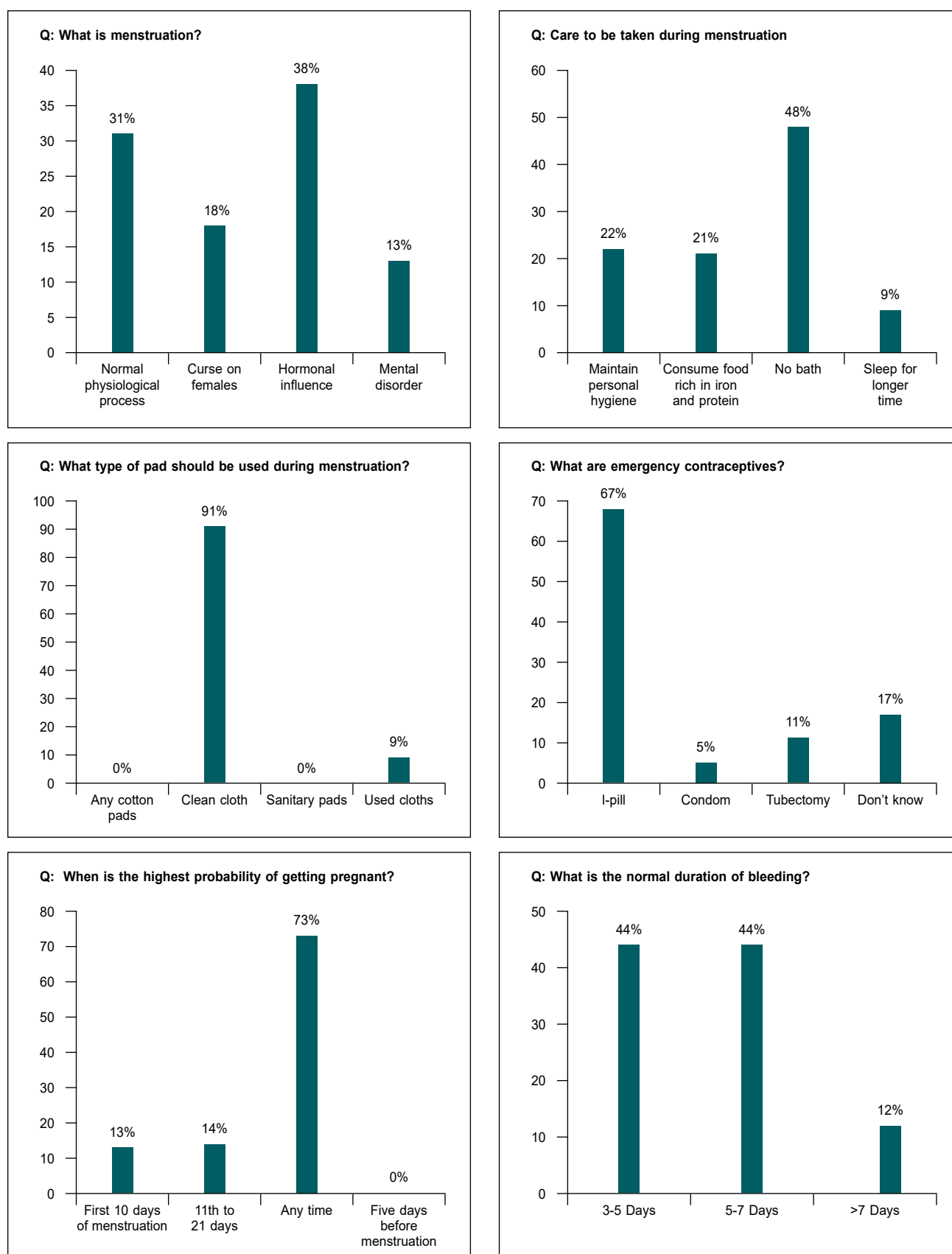


Figure 2 (a-f). Responses of KAM questionnaire (Q- question asked).

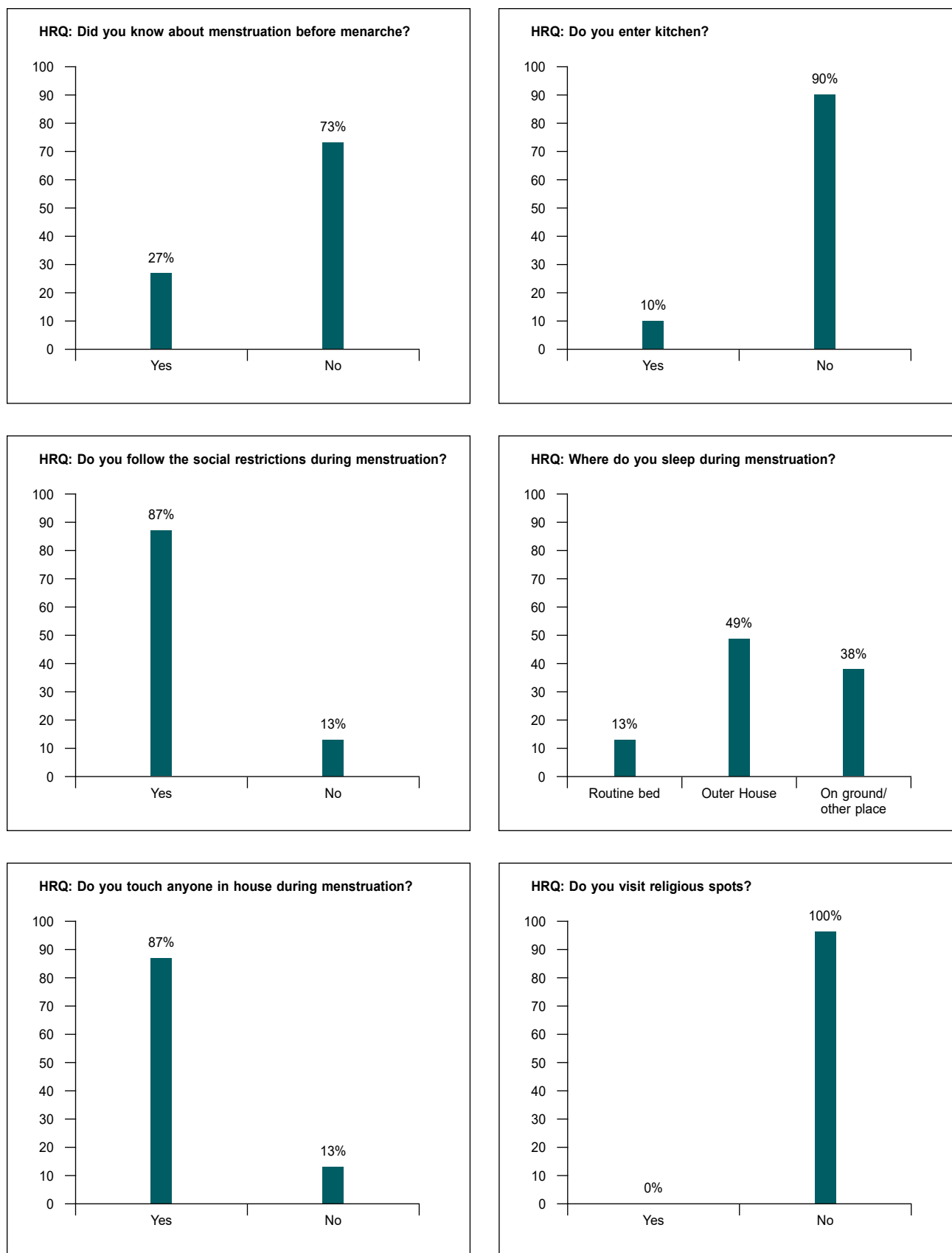


Figure 3 (a-f). Responses of HR questionnaire (HRQ- Hygiene Related Question).

majority of questions. However, 18% of respondents consider menstruation as a curse on them, similarly, 48% of respondents were not preferring to take bath during first 4 days of menses. About 73% of respondents did not know the window period of the menstruation cycle when the probability of getting pregnant is highest.

The KAM seems to be at disparity with the level of education of subjects because about 50% of respondents have completed graduation, postgraduation, or professional degrees (Table 1). It means there should be a structured campaign about the menstruation related knowledge to enhance the awareness regarding prevailing misinformation. Menstruation is considered related with the impurity in the Himalayan region, including Nepal¹.

The responses gathered through HRQ (Fig. 3) presents information about some of the orthodox customs still being practiced despite high literacy rate of the state 78.8% (India literacy rate 72.99%)³ and 50% of our volunteers having graduate or higher degrees or professional degrees (Table 1) which indicates that society and government should provide specific scientific knowledge at appropriate level to eradicate unscientific practices among young women.

More than 73% responders were not aware about menstruation before menarche. Social restrictions are observed in 87% respondents. Ninety-nine percent respondents do not enter in religious places, while 90% do not enter in the kitchen. Forty-nine percent of respondents are sleeping on the outer houses which are traditionally meant for cows. About 38% subjects who do not have outer houses, they do sleep on the ground during menstruation. The restrictions are also followed in the urban areas like Delhi⁴ or slum regions of West Bengal⁵, a study amongst the tribal girls of Kashmir also showed poor hygiene concept⁶.

DISCUSSION

It may be inferred from the responses received from 400 volunteers that there should be a social awareness program to educate the young girls about menstruation, related hygiene practices and a need of removing social taboos through social awareness. The most important taboo is not entering in the kitchen or water bodies during menstruation. This creates dependency on others to cook food and provide to the menstruating women. Information about the sexually transmitted diseases and emergency contraceptive measures should also be communicated to the young women to have a healthy society. Many of the social taboos are also practiced in

many of the developing countries like Nepal, Egypt, Nigeria, and Ethiopia^{1,2,7,8}. This indicates that social taboos are not unique to India; it is being practiced in different cultures in many countries. Therefore, a global initiative is required to aware our next generations and treat menstruation as normal physiological phenomenon of the women.

CONCLUSIONS

social restrictions are followed by almost all participants follow social restrictions like not to touch drinking water sources or entering in the religious places, irrespective of level of education. Most of the participants were not mentally and educationally prepared for menstruation before menarche. Thus, there is a need of mass awareness initiatives to educate young girls.

Competing Interests

The authors declare that there are no competing interests.

Authors' Contribution

VS, SB, and SJ executed the study and prepared the initial manuscript. SM designed, supervised, and approved the final manuscript.

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