



KNOWLEDGE AND AWARENESS REGARDING MENSTRUAL HYGIENE AMONG MEN IN THE KANGRA DISTRICT OF HIMACHAL PRADESH, A COMPARATIVE STUDY

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ABSTRACT

Introduction: Menstrual hygiene is a critical yet often overlooked aspect of women's health, particularly in rural areas where cultural taboos and limited education prevail. In patriarchal societies like India, men play a significant role in decision-making regarding women's health, yet their awareness of menstrual hygiene remains inadequate. This study aims to bridge this gap by assessing the awareness of menstrual hygiene among married and unmarried men aged 18-35 in selected rural areas of Himachal Pradesh. **Objective:** This study aims to assess and compare the knowledge and perceptions of menstrual hygiene among married and unmarried men in rural areas of Himachal Pradesh, India. **Material and Methods:** The study utilized an unmatched case-control design, involving 268 participants from selected villages in Nagrota Bagwan and Shahpur health blocks of Kangra district. Married men were considered as the case group, while unmarried men served as the comparator group. Data were collected through interviews, and statistical analysis was conducted to compare demographic characteristics, education, occupation, socioeconomic status, and knowledge about menstrual hygiene between the two groups. **Results:** Significant differences were observed between married and unmarried men regarding their awareness and knowledge of menstrual hygiene. Married men exhibited higher levels of awareness, possibly influenced by factors such as age, education, and exposure to household activities with female family members. **Conclusion:** The study underscores the need for targeted educational interventions focusing on unmarried men to promote positive attitudes and behaviors towards menstrual health. Implementing comprehensive educational programs, encouraging community dialogues, and integrating menstrual hygiene education into existing health services are essential steps toward improving women's reproductive and sexual health outcomes in rural regions.

KEYWORDS: Menstrual hygiene, Awareness, Men, Rural areas, Himachal Pradesh.

INTRODUCTION

WHO defined health as the state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity, but it includes ability to lead socially and economically productive life.¹ Being a man or women has a significant impact on health, as a result of both biological as well as gender related differences.

Menstruation is normal and healthy part of life in most of women. On an average a women usually menstruated for about 7 years during her lifetime.¹ Menstruation is considered unclean and dirty in many societies. Taboos, myths and restrictions associated with menstruation leave a negative impact on women life. Ignorance and inadequate menstrual hygiene leads to increased vulnerability to reproductive tract infections and even infertility in long term. Overall the menstrual hygiene has become important and neglected area affecting women health. As per NFHS-4, 84% of rural women use a hygienic method (sanitary napkins) of menstrual protection, compared with 90% of urban women. It shows major improvement focusing menstrual health.² Menstrual hygiene remains a critical yet often overlooked aspect of women's health, particularly in rural areas where cultural taboos and limited access to education prevail. In patriarchal societies like India, men play a significant role in decision-making regarding women's health and well-being, yet their awareness of menstrual hygiene remains inadequate. This study aims to bridge this gap by assessing the

awareness of menstrual hygiene among married and unmarried men aged 18-35 in selected rural areas of Himachal Pradesh. By understanding the knowledge and perceptions of men regarding menstrual hygiene, this research seeks to inform targeted interventions and educational programs aimed at promoting positive attitudes and behaviors towards menstrual health, ultimately improving women's reproductive and sexual health outcomes in the region.

MATERIAL AND METHODS

The study was an unmatched case and control design where married men were considered as a case group and unmarried men as a comparator group. This study was carried out in selected villages of Nagrota Bagwan and Shahpur health blocks. From each health block a list of villages was obtained and 30 cluster were selected from each block. A village was considered as a cluster. The requisite sample size (married and unmarried men) was divided by number of clusters and same number of participants were recruited from each cluster. In a case, if requisite number of study participants could not be met from selected cluster, then sample size per cluster was met from adjoining village. The total of 268 participants involved in the study including 134 married men as case and 134 unmarried men as control. Ethical clearance for the study was obtained from Institutional Ethics Committee of Dr Rajendra Prasad Government Medical College Kangra at Tanda, Himachal Pradesh India [Registration No: IEC/24/2021]. Participation of



the subjects in the study was voluntary and written informed consents were obtained from all the participants.

RESULTS

The study regarding awareness of menstrual hygiene was conducted in two blocks of Kangra district. A total of 268 participants were interviewed in the study. The findings of the study are presented below.

The table-1 is showing demographic characteristics of respondents. The type of family among cases, majority (57.5%) belongs to joint family whereas among controls, the majority (65.0%) belongs to nuclear with statistically significant difference (P=0.000).

The majority among both groups (cases as well as controls) belongs to the OBC category with statistically significant difference. The statistical indifference was observed for religious association, as all the respondents in the case group while 97.0% respondents in control group practise Hindu religion. (Table:1)

Characteristics	Case n=134, (%)	Control n=134, (%)	P value
Type of family			
Joint	77 (57.5)	35 (26.0)	0.000
Nuclear	47 (35.1)	87 (65.0)	0.000
Three generation	10 (7.5)	12 (9.0)	0.824
Cast			
General	48 (35.8)	31 (23.1)	0.031
SC	19 (14.2)	16 (11.9)	0.717
ST	10 (7.5)	6 (4.5)	0.440
OBC	57 (42.5)	77 (57.5)	0.007
Others	0 (0.0)	4 (3.0)	0.020
Religion			
Hindu	134 (100)	130 (97.0)	0.122
Sikh	0 (0.0)	4 (3.0)	0.122

Table-1 showing demographic characteristics of men from rural areas of Himachal Pradesh

The table-2 describes the study participants according to their education status. The table displays that the graduates were more 58 (43.3%) in cases and 59 (44.0%) in control group while none were illiterate in both cases as well as control group. The intermediate educational level was observed in 37 (27.6%) among cases and 59 (44.0%) among the comparator group which was statistically significant (P=0.007)

The part B of table-2 describes participants according to their self-reported occupation status. The majority (40.3%) among case group were businessman/ shop owners followed by skilled workers (26.1%). Among controls the majority (47.8%) were unemployed followed by skilled workers (22.4%). The differences across these occupations were observed to be statistically significant (P=0.000)

Characteristics	Case n=134, (%)	Control n=134, (%)	P value
Education status (Self)			
Postgraduate	8 (6.0)	2 (1.5)	0.102
Graduate	58 (43.3)	54 (40.3)	0.710
Intermediate	37 (27.6)	59 (44.0)	0.007
High school	24 (17.9)	14 (10.4)	0.114
Middle school	4 (3.0)	4 (3.0)	0.084
Primary school	3 (2.2)	1 (0.7)	0.622
Illiterate	0 (0.0)	0 (0.0)	NC
Occupation (Self)			
Professional	7 (5.2)	2 (1.5)	0.172
Semi professional	22 (16.4)	6 (4.5)	0.002
Businessman/ shop owner	54 (40.3)	17 (12.7)	0.000
Skilled worker	35 (26.1)	30 (22.4)	0.568
Semiskilled worker	4 (3.0)	5 (3.7)	1.000
Unskilled worker	4 (3.0)	10 (7.5))	0.167
Unemployed	8 (6.0)	64 (47.8)	0.000

The Table-2 is showing the educational status and occupation of men in rural areas of Himachal Pradesh



The table-3 describes the study participants according to their socioeconomic status. Higher proportion of participants

belongs to middle class in case group (43.2%) and control group (52.2%) with no statistically significant differences.

Characteristics	Case n=134, (%)	Control n=134, (%)	P value
Upper class	8 (5.97)	3 (2.2)	0.216
Upper middle class	40 (29.8)	25 (18.6)	0.045
Middle class	58 (43.2)	70 (52.2)	0.178
Lower middle class	26 (19.4)	33 (24.6)	0.376
Lower class	2 (1.4)	3 (2.2)	1.000

The Table-3 is showing the socioeconomic status of participants in rural areas of Himachal Pradesh

The table-4 describes the study participant's social interaction with their sisters. The 66.4% among cases and 68.6% among controls were having sisters as their siblings only and rest of the participants were having none. 58 (65.1%) among cases and 66 (71.7%) among the comparator group were having one sister each only. Out of them, 7.86% among cases and 18.4% among

controls were educated from same school as their sisters. Both cases and controls group did not observe any statistically significant difference with respect to their interaction with sisters

Characteristics	Case n=89, (%)	Control n=92, (%)	P value
Participants having 1 sibling sister	58 (65.1)	66 (71.7)	0.423
Participants having 2 sibling sisters	24 (26.9)	23 (25.0)	0.865
Participants having 3 sibling sisters	6 (6.74)	3 (3.26)	0.324
Participants having 4 sibling sisters	1 (1.12)	0 (0.0)	0.491
Participants who were educated from same school in which his sister is studying	51 (57.3)	64 (69.5)	0.092
Participants who were in same class in which his sister is studying	7 (7.86)	16 (17.3)	0.073
Participants who play with his sister indoors	78 (87.6)	79 (85.8)	0.872
Participants who play with his sister outdoors	75 (84.2)	77 (83.69)	1.000
Participants who help his sister in doing school homework	69 (77.5)	75 (81.5)	0.581
Participants who help the sister in doing household activities	74 (83.1)	80 (86.9)	0.534
Participants who are helped by their sister for school homework	73 (82.0)	78 (84.7)	0.691

The Table-4 is showing the social interaction of married and unmarried men with their sisters in selected rural areas of Himachal Pradesh

The table-5 describes the knowledge about women menstrual hygiene among study participants. All the participants in case group and 76.1% in control group are aware of menstrual hygiene and its health impacts (P<0.001).

About 60.0% of the participants in case group and 25.0% in control group believe that sanitary pads should be disposed by pit burning or dumping in pit with statistically significant difference (P<0.001).

All the participants in case group and 82.0% in control group knows that sanitary pads should be used during menstruation (P<0.001). Significant higher proportion of participants in case group reported that cloth can be reused during the menstruation (31.3% vs 8.2%, <0.001).

Majority of participants (36.5% vs 0.7%, <0.001) in case group reported that sexual activity should not be done during menstruation. (Tabl



Characteristics	Case n=134, (%)	Control n=134, (%)	P value
Aware about menstrual hygiene and its health impact	134 (100.0)	102 (76.1)	0.000
Knowledge about menstrual cycle	134 (100.0)	61 (45.5)	0.000
Should be used during menstruation			
Sanitary pads	134 (100.0)	110 (82.0)	0.000
Cotton	0 (0.0)	0 (0.0)	NC
Washed cloth	0 (0.0)	0 (0.0)	NC
Don't know	0 (0.0)	24 (17.9)	NC
Can be reused during menstruation			
Sanitary pads	2 (1.4)	1 (0.7)	1.000
Cotton	5 (3.7)	1 (0.7)	0.213
Washed cloth	42 (31.3)	11 (8.2)	0.000
Menstrual cup	11 (8.2)	9 (6.7)	0.816
Don't know	74 (55.2)	112 (83.5)	0.000
Sanitary pads disposed by			
Throw along with domestic refuse	25 (18.6)	28 (20.8)	0.759
Pit burning, dumping in pit	80 (59.7)	33 (24.6)	0.000
Other	4 (2.9)	1 (0.7)	0.370
Don't know	25 (18.6)	72 (53.7)	0.000
Sexual activity should not be done during menstruation	49 (36.5)	1 (0.7)	0.000

NC: Not Computed

The table-5 describes knowledge about women menstrual hygiene among married and unmarried men in selected rural areas of Himachal Pradesh

DISCUSSION

In pregnancy, women face greater risks, both because of physiological differences and gender inequities. Marriage is a partnership and women have a right to health but protecting that right often depends on a partner's support.³ Worldwide, only a few studies have been conducted to explore men awareness regarding menstrual hygiene among women. Most studies on awareness regarding menstrual health have been rightfully conducted on women subjects. The present study was aimed to measure the difference in awareness between married and unmarried men of 18-35 years of age towards menstrual hygiene among women in selected rural areas of a district in Himachal Pradesh. It is community-based unmatched case control study in which 268 participants- 134 cases (married participants) and 134 controls (unmarried participants) were recruited for assessment.

In present study among married participants majority belonged to joint family while among unmarried participants majority (64.9%) belonged to nuclear family. A hospital based cross-sectional study was done by Narang H. et al⁴ at Lady Hardinge Medical College, New Delhi among 232 married participants. In this study as well, most (60.3%) of married participants were living in joint families. J. Suresh and P. Balram⁵ conducted a community based cross-sectional study among 385 married men in rural areas of Maharashtra in which majority (60.8%) of married participants belonged to nuclear families and 39.2% belonged to joint families. Char A. et al⁶ conducted a study in

which 51.6% of unmarried participants living innuclear families and 48.4% living in joint families.

India is a patriarchal society where men have greater power in decision-making. Women do not generally share information about menstruation with men. Most men do not know about the normal physiology of menstruation, such as the menstrual cycle. However, men are responsible for decision-making regarding facilities and services needed by women, including access to toilets and the availability of sanitary napkins, and women empowerment (education, occupation). In present study among married men, all (100.0%) were aware of menstrual hygiene and have knowledge about normal menstrual cycle. Among unmarried men, 76.1% were aware of menstrual hygiene and only 45.5% correctly know about normal menstrual cycle. Verma P. et al⁷ conducted a community based cross-sectional study among 6431 married men in urban areas of Uttar Pradesh. In this study the one-fifth of the men have the correct information about pregnancy risk during the menstrual cycle while the remaining four-fifth of them do not have the accurate information about this concept. Kothari B.⁸ conducted a community based cross-sectional study among 45 married men in rural areas of Jaipur, Rajasthan. In this study the married men considered menstruation essential to make a woman complete but only about half (51.5%) of them correlate it with the process of conception. In the past few years, a growing body of research and practice-based knowledge has identified the key components of comprehensive menstrual



hygiene programming. However, there is little documented on how to effectively engage men in menstrual hygiene interventions. There is need of programs that also focus on boys and men regarding importance of menstrual hygiene.

There were significant differences in knowledge and perception among married and unmarried men regarding women reproductive and sexual health. Most of the married men were older, belongs to joint families and have higher education status in contrast to unmarried men. The difference in education status is due to the age differences among unmarried (mean age: 24 years) and married men (mean age: 32.4 years). The married men are more aware about menstrual hygiene as compared to unmarried men. The main reason could be the experience the married individuals have after being married as they are more aware of women problems and requirements as compared to unmarried men. Engagement for household activities with their sister along with high level of literacy explain the reason for high level of awareness among married and unmarried men. It is a good sign of high level of knowledge among men as they will be the future spouses and play an expectedly positive role in women health.

CONCLUSION

The article discusses a community-based study conducted in rural areas of a district in Himachal Pradesh, India, aiming to assess the awareness of married and unmarried men aged 18-35 regarding menstrual hygiene among women. It compares the knowledge and perceptions of menstrual hygiene between married and unmarried men, highlighting significant differences in awareness levels. Married men showed higher awareness compared to unmarried men, attributed to factors such as age, education, and exposure to household activities with female family members. The study underscores the need for programs focusing on educating men, particularly unmarried ones, about menstrual hygiene to promote women's reproductive and sexual health. Overall, it emphasizes the importance of engaging men in understanding and supporting menstrual hygiene practices for improved women's health outcomes.

Implementing the comprehensive educational programs targeting specially unmarried men in rural areas of Himachal Pradesh to increase awareness about menstrual hygiene. Encourage open community dialogues to challenge traditional gender norms and integrate menstrual hygiene education into existing health services. Launch media campaigns to disseminate accurate information and develop targeted interventions specifically tailored to unmarried men to address their lower awareness levels. These initiatives will contribute to promoting positive attitudes towards menstrual hygiene, ultimately improving women's reproductive and sexual health outcomes in the region.

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