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# **Menstruation Related Practices among Adolescent Girls and Women** in a Semi-urban Area of Nepal

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## **ABSTRACT**

# **Background**

Menstruation is often associated with restrictions from different activities. Studies about extreme form of menstruation practices i.e. "Chhaupadi" have been widely done but other practices have been less studied. Thus, this study aimed to find out the menstruation related practices among adolescent girls and women in secondary schools in a semi-urban community of Nepal.

#### Methods

This was a descriptive cross-sectional study done at two secondary schools in a semi-urban community of Panauti municipality which were selected purposively. The duration of study was from 31st October 2022 to 15th November, 2022. Total 158 adolescent girls and women present at the study site who have had menarche were included in the study through census sampling. Ethical approval was taken from the Institutional Review Committee [Reference number: 36/22] of Kathmandu University School of Medical Sciences. Self-administered semi-structured questionnaires were used to collect the information.

#### Results

Among 158 study participants, menstrual restriction practice was followed by 155(98.66%) and most common restriction was not being allowed to worship or go to worshipping room 150 (96.77%). Most (68.98%) of the study participants said that their mother insisted them to follow such practices.

#### **Conclusions**

Menstruation related practices were common among the study participants and most common form of restriction was not being allowed to worship.

**Keywords:** menstruation; practices; Nepal.

# INTRODUCTION

Menstruation is a normal physiological phenomenon but it is usually associated with various myths and taboos. Menstruation has often been related with impurity and untouchability in different cultures. This has resulted in exclusion and restriction of menstruating women and girls from various activities including daily routine activities.<sup>1,2</sup> The restrictions during menstruation have a deep impact on the psychology of women and it also hampers their education and performance.<sup>3,4</sup> Practices of exclusion from social activities and restrictions to nutritious food

are a form of gender-based violence.<sup>5</sup> Much emphasis has been given on exploring about menstrual hygiene and "Chhaupadi" practiced in some parts of Nepal.<sup>6</sup> But scarce information is found about menstruation related practices which are common in most parts of Nepal. Thus, the aim of the study was to find out the menstruation related practices of adolescent girls and women in two secondary schools of a semi-urban community of Panauti municipality of Nepal.

# **METHODS**

This was a descriptive cross-sectional study which was conducted among female students and female

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employees working at secondary schools in Panauti of Kavrepalanchok district. Total of two schools were purposively chosen as per feasibility of the investigator. The duration of study was from 31st October 2022 to 15th November 2022.

Ethical approval was taken from Institutional Review Committee of Kathmandu University School of Medical Sciences [Reference number: 36/22]. Permission to conduct the study was also taken from respective schools. All healthy women and adolescent girls who have had menarche and were either student or working at the selected schools were eligible for the study while pregnant women and women who had menopause were excluded. A census sampling technique was used.

The sample size was calculated using the following formula:

 $n=z^2 pq/e^2$  $= 1.96^2 (0.5X0.5)/0.08^2$ = 150

Where, n= minimum required sample size

Z= 1.96 at 95% Confidence Interval (CI)

p= prevalence taken as 50% for maximum sample size calculation

q=1-pe= margin of error, 8%

The minimum required sample size was 150; however, all eligible respondents present during the period of data collection were taken which came out to be 158. Written consent was taken from all the participants before the study. The study used a previously developed semi-structured questionnaire which was modified for this study.8 Adolescent girls were defined as girls within the age of 10 to 19 years. Women were described as those within 20 to 45 years of age who have not had menopause and were not pregnant at the time of study. Menstruation related practice was defined as any exclusion, restriction and practices followed only during the period of menstruation by women and girls. Questionnaire included two sections one of which was socio-demographic profile of study participants which consisted of age, religion, ethnicity, ownership of house and type of family. The second section was about practices followed during

menstruation which included 13 menstruation restriction practices and one question was about person who insisted to follow such practices. If any of the answer for practices followed during menstruation was "yes" then menstrual related practice was defined to be present. The questionnaires were distributed during the specific time allocated by teachers during which only female students from class six to ten were gathered in a separate classroom. All the female students who were present on the day of data collection within the inclusion criteria were invited for the study. Students from different classes were merged depending upon the free time of students for data collection. The objectives of the study, confidentiality, voluntary participation were explained to the respondents before data collection. The filled questionnaires from the female students were collected on the same day. The questionnaires for the female employees were distributed with the help of one of the female teachers and collected on the next day due to time limitation. Data analysis was done using International Business Machines Statistical Package for Social Sciences version 16 (IBM SPSS16). Mean, median, frequency, percentage and standard deviation were calculated for descriptive analysis.

## RESULTS

The study was conducted among 158 adolescent girls and women out of which, menstrual related practices was followed by155 (98%). Out of 158 study participants,50 (31.65%) were female employees (teachers and staffs) while 108 (68.35%) were female students. The mean± SD age of students was 13.77±1.30 years while the mean± SD age of employees was 27.88±6.18 years. As shown in table 1, more than three-fourth 136 (86.07%) respondents were Hindu and 62 (39.24%) were Bramhin (Table 1).

Most (73%) of the respondents said that their mother also followed menstrual restriction practices. Multiple response questions were asked to identify the person who insisted to follow menstruation related practices. A majority (68.98%) of the respondents and 28 (17.72%) said that their mother and grandmother insisted them to follow such practices while 18

Table 1. Socio-demographic profile of study participants (n= 158)		
Variables	Frequency (%)	
Religion		
Hindu	136 (86.07)	
Buddhist	22 (13.93)	
Ethnicity		
Bramhin	62 (39.24)	
Chhetri	41 (25.95)	
Janajati and others	55 (34.81)	
Type of family		
Nuclear	88 (55.70)	
Joint	70 (44.30)	
House		
Own	145 (91.77)	
Rented	13 (8.23)	

(11.39%) respondents said that they themselves followed menstrual restriction practices (Figure 1).

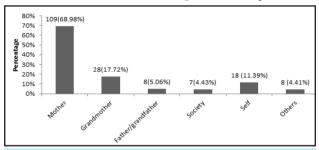


Figure 1. Person insisting to follow menstrual restriction practices. (n=158)

Multiple response questions were asked for identifying menstrual related practices of respondents. As shown in table 2, a majority (96.77%) of the respondents was found to follow restriction of worshipping or going to worshipping room and three-forth (75.48%) had restriction of going to social and religious gathering. Likewise, the minorities (2.58% and 0.46%) of respondents were not allowed to play and not allowed to go to school or work respectively. Few (14.19%) respondents were also not allowed to touch or eat certain foods during menstruation.

## **DISCUSSION**

In the present study menstrual restriction practices was found to be followed by almost all respondents and such practices were passed on mainly by mothers and grandmothers. Though the practices were not divided into harmful and non-harmful practices in this study, social exclusion and nutrition restrictions

Table 2. Menstruation related practices of study participants (n=155)		
Variables	Frequency (%)	
Sleep separately	30 (19.35)	
Had to bathe, clean, wash outside the house	25 (16.12)	
Not allowed to touch male members	32 (20.64)	
Not allowed to touch plants	50 (32.25)	
Not allowed to touch water source	23(14.83)	
Not allowed to go to kitchen or cook	92 (59.35)	
Had to eat separately	31 (20.00)	
Not allowed to worship/enter worshipping room	150 (96.77)	
Not allowed to play	4 (2.58)	
Not allowed to go to school/work	1 (0.64)	
Not allowed to go to religious/social gathering	117 (75.48)	
Had to bathe daily	41 (26.45)	
Not allowed to touch or eat certain food	22 (14.19)	

were commonly found which are forms of gender inequalities. In this study 98% of the adolescent girls and women followed menstrual restriction practices which are similar to findings from study done in Accham, Managalsen Nepal in which 94.1% respondents faced menstrual restrictions in social and household activities.7 Likewise, it was found that mother followed by grandmother were the main person who insisted on following menstrual restriction practices. This finding is similar to study done in Kathmandu valley in which 72% of the women and girls said that their mother asked them to follow menstruation restriction practices.8 As such practices have been followed since ages, it is still commonly found. Most of the participants of our study reported not being allowed to enter worshipping room and worship during menstruation. Not taking part in any religious or social activities in the society during menstruation was also found. These findings are similar to study from five districts of Nepal in which 98% of the respondents were not allowed to worship.9 Similarly, studies from Uttar Pradesh, Bengaluru, Nigeria and Ghana also showed that most of the girls were not allowed to go to the worshipping room and take part in any religious or social activities during menstruation. 10-13 Further, this study showed that 19% of respondents had to sleep separately during menstruation which is

similar to study among urban and rural girls of India in which 14% of adolescent girls were forbidden to sleep in their regular beds and study from Ghana in which 15% slept separately during menstruation.<sup>13</sup> Menstrual blood has been considered to be impure and causing bad luck thus such practices have been found in many parts of Nepal. Similarly, this study found out that 16% of the women and girls had to bathe or clean outside the house during menstruation but a study from Achham, a district from far western region of Nepal showed higher prevalence of 63%. This difference may be because people are still practicing severe forms of menstrual restriction in rural parts of Nepal in which women are even excluded from the house while milder forms of restriction may be practiced in urban and semi-urban areas.1 Likewise, similar percentage of respondents said that they were not allowed to touch male members during menstruation in our study and study from Achham i.e. 20% and 17% respectively. In the present study, it was found that 32% of the women and girls were not allowed to touch plant or fruits which were similar to findings from a study done in Kathmandu valley in which not touching plant/fruits was 48%.8 Restriction to touch fruits was also seen in a qualitative study conducted in Fiji, Solomon Islands and Papua New Guinea.<sup>14</sup> Likewise, 15% of the respondents said that they were not allowed to touch source of water which was lower than that found in Kathmandu valley i.e. 32%.8 Present study revealed that 58% women and girls couldn't enter the kitchen or cook food during menstruation which is similar to finding from a study from Kathmandu valley done among adolescent girls and women and study done in five districts of Nepal.<sup>8,9</sup> However, 80% of respondents in Achham were found to follow this restriction which may be due to the area being very remote and well known for such harmful practices.7 In this study, 20% of the respondent ate separately during menstruation which was similar to study from Kathmandu valley which was 31% while 12% of girls from Bengaluru ate separately during menstruation.8, 11 This study also showed that restrictions of playing during

menstruation was 2.5% only which is very low compared to studies from Karnataka India and Iran where 20% and 19% of the respondents were not allowed to play during menstruation respectively. 15, <sup>16</sup> It was found that very few women and girls didn't attend school or went to work during menstruation which was in contrast to study done in Kathmandu in which 21% of women didn't go to school or work during menstruation.8 This difference might be due to the knowledge of proper menstrual hygiene management of the respondents and sanitation and hygiene facilities provided at given schools. This study found out that avoiding religious and social gathering during menstruation was 74% which was similar to findings from adolescent girls and women in Kathmandu.7 Similar findings were seen in studies from Bengaluru and Nigeria. 11, 12 But it was much higher than findings from Karnataka, India in which 37% of girls didn't attend religious functions or gatherings. 15 This difference may be due to the difference in ethnicity, religion and cultural values of people living in India and Nepal. Our study found that 74% of the women and girls had to bathe daily during menstruation which is similar to study from Karnataka, India, where 90% of girls bathed during menstruation.15

This study found out that 14% women and girls experienced food related menstruation restriction while higher percentage of food restriction was seen among women and girls of Achham and Bengaluru, India.<sup>7, 11</sup> The study has certain limitations. One is that the study was limited to two schools only thus, this study may not represent whole Panauti municipality. Secondly, the study topic and questions were sensitive in nature thus, response bias could be present. However, use of self-administered questionnaire to the participants could have minimized this bias.

## **CONCLUSIONS**

Menstruation related practices were found to be very common in this study. Most common form of restriction was not being allowed to worship and mothers were the main person who persuaded them to follow the restrictions.

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