

Research article

# Knowledge and practice regarding menstrual hygiene among physically disabled women in Kathmandu, Nepal

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## ABSTRACT

**Background and Objectives:** Disability is the condition of difficulty in carrying out daily activities normally and in taking part in social life due to problems in parts of the body and the physical system. Disability also carries stigma, so disabled people may face layers of discrimination when they are menstruating. The objective of the review is to assess the menstrual hygiene practice of disabled women, the barriers they face, and the available interventions to help them manage their menstruation hygienically and with dignity.

**Material and Methods:** This was a cross-sectional descriptive study that was conducted among 151 physically disabled peoples. Self-structured questionnaire and face-to-face interview was used as data collection tools and techniques. Data entry and analysis was done using SPSS 16.0. The results of the study were presented with the help of tabular description using the same software along with Microsoft word and excel 2007.

**Results:** Most of respondents knew the 26-30 days as normal cycle duration (80.13%). Majority of respondents had reported that they do not go to holy places (91.39%) and should not cook food (94.03%) during menstruation. Most of respondents had stayed (96.68%) and eat (98.01%) at same place and 31.38% of respondents had bath daily during menstruation. 83.44% of respondents used sanitary while 69.53 % of respondents changed pad twice a day. Maximum number of the respondents 91.39% disposed sanitary pad in dustbin. 87.41% of respondents learned about menstrual hygiene from parents.

**Conclusion:** Good and satisfactory knowledge about menstrual hygiene was found among girls of age group 15-24years.

**Key Words:** Knowledge, practice, menstrual hygiene and physically disabled

## INTRODUCTION

Disability is the condition of difficulty in carrying out daily activities normally and in taking part in social life due to problems in parts of the body and the physical system as

well as obstacles created by physical, social, cultural environment and by communication [1]. Prevailing illiteracy, ignorance, and negative perception on the disability in the society it is considered as the punishment of the god for some sin committed in the past

life but it is not so. It is a human reality that occurs in all the ages from birth to old age [2].

The onset of menstruation is one of the most important changes occurring among the girls during the adolescent. Menstruation and menstrual practices are still clouded by taboos and socio-cultural restrictions resulting in adolescent girls remaining ignorant of the scientific facts and hygienic health practices, which sometimes result into adverse health outcomes [3].

According to population census 2068, nearly 2 % of total population of Nepal are disabled and among them 44% of them are female. In 44 % of female disables, 36 % are physically disabled [4]. Most obstetrician-gynecologists will encounter adolescents with disabilities in their practice. Reproductive health issues such as puberty, sexuality, and menstruation can be more complicated for teenagers with disabilities and their families as a result of concerns surrounding menstrual hygiene, abuse risk, vulnerability, and altered mood [5]. Hygiene-related practices of women during menstruation are of considerable importance, as it has a health impact in terms of increased vulnerability to RTI [6]. In this condition menstruation and disability both are affected by socio-cultural factors. Thus our study will help to find out how disable women are vulnerable to menstrual hygiene problems and their practice.

## MATERIAL AND METHODS

A structured questionnaire was developed. The questionnaire had been designed to collect socio-demographic information, food frequency, and dietary diversification, diet pattern. Self-administered questionnaire in Nepali language had been provided to the respondents and were explained about the

questions. The research was approved by ethical research committee of CAFODAT College. Total 250 Medical Representatives were randomly selected for research, out of which 231 accepted to participate in the study and gave appointment. The descriptive, cross sectional study was conducted to assess the knowledge and practice regarding mensuration hygiene among physically disables women in Disable Rehabilitation Center, Jorpati area of Kathmandu. Sample size was calculated by the  $(n) = \frac{Z^2 P (1-P)}{d^2}$ .

Where, n= sample size, P= expected prevalence or proportion, d= precision, Z= Z statistic for a level of confidence. We have, p= 0.89% = 0.52 (7), d= 5% = 0.05, Z= 1.96 for 95% confidence interval, 1-p= 0.49. Then, n=  $1.96 \times 1.96 \times 0.89(0.11) / 0.05 \times 0.05 = 151$ . Data was collected from 15 Feb to 15 March 2018. The required sample size was 151. Semi-structured questionnaire was used to collect data. Written consent was obtained from each respondent. Confidentiality was assured and maintained. Data was entered in statistical package for social science (SPSS) version 20 and analyzed and interpreted in terms of descriptive (Frequency, Percentage)

## RESULTS

Socio-demographic status of the respondents is presented in table 1. It was found that more than about half of the respondents (56.29%) were of age group 15-24 years. Majority of the respondents i.e. 94.03% were found to be unmarried. Nearly four number of respondents (74.17%) followed Hindu religion. Majority of the respondents were Brahmin (31.12%) and followed Janajati (23.17%). Regarding educational status, 13.24% of the respondents had achieved secondary, 37.08% primary, 5.29% Higher Secondary while 27.81 % were literate and

16.55% were illiterate. More than one third numbers of respondents (38.41%) had disability related to lower limb, 30.46% had upper and lower, and 22.51% had with Upper limb. The 91.39 % of respondents reported the right age of menarche. Maximum number

(80%) of respondents reported the 26-30 days as normal cycle duration. Majority of respondents (91.39%) reported that they do not go to holy places during menstruation and should not cook food during menstruation. Only 3.31 % of respondents had taken health education class or training related to menstrual hygiene. It was found that 87.41% of respondents were informed about mensuration by their parents whereas other was taught by teachers and course books.

Maximum number of respondents (96.68%) reported that they stayed at same place

**Table 1: Socio-demographic characteristics of the respondents n=151**

Socio-demographic characteristics	Frequency (n=151)	Percent (%)
<b>Age (In Years)</b>		
15-24	85	56.29
25-34	43	28.47
>34	23	15.23
<b>Marital status</b>		
Unmarried	142	94.03
Married	9	5.97
Divorced	0	0
Separated	0	0
<b>Religion</b>		
Hindu	112	74.17
Buddhist	25	16.55
Christian	14	9.27
<b>Ethnicity</b>		
Bhramin	47	31.12
Janajati	35	23.17
Chettri	43	28.47
Dalit	22	14.56
Other	4	2.64
<b>Educational status</b>		
Illiterate	25	16.55
Literate	42	27.81
Primary	56	37.08
Secondary	20	13.24
Higher Secondary	8	5.29
<b>Type of disability</b>		
Lower limb	58	38.41
Head neck spinal	13	8.60
Upper n lower	46	30.46
Upper limb	34	22.51

**Table 2: Knowledge regarding menstrual hygiene, n=151**

Knowledge regarding menstrual hygiene	Frequency (n=151)	Percent (%)
<b>Normal age to begin menstruation</b>		
11-15	138	91.39
Others	13	8.60
<b>Normal flow of bleeding</b>		
3-5 days	102	67.54
5-7 days	49	32.45
<b>Normal cycle duration</b>		
26-30 days	121	80.13
30-35	26	17.21
Others	7	4.63
<b>Go to holy places during period</b>		
No	138	91.39
Yes	13	8.61
<b>Cook food during period</b>		
No	142	94.03
Yes	9	5.96
<b>Taken training/health education class</b>		
No	146	96.68
Yes	5	3.31
<b>Source of knowledge about menstruation</b>		
Parents	132	87.41
Teachers	13	8.60
Course book	6	3.97

**Table 3: Practice Regarding Menstrual Hygiene. n=151**

Practice regarding menstrual hygiene	Frequency (n=151)	Percent (%)
<b>Stay during period</b>		
Same place	146	96.68
Separate place	5	3.31
<b>Time of bath</b>		
1st day	26	17.21
4th day	65	43.04
Daily	48	31.78
Others	12	7.94
<b>Place to eat food</b>		
Same place	148	98.01
Outside kitchen	3	1.98
<b>Type of pad</b>		
Clothes	25	16.55
Sanitary pad	126	83.44
<b>Period to change pad</b>		
Change daily	16	10.59
Twice a day	105	69.53
Depends upon situation	30	19.86
<b>Share common pads</b>		
No	150	99.33
Yes	1	0.66
<b>Reuse pad</b>		
No	146	96.68
Yes	5	3.31
<b>Place of pad disposal</b>		
Mud	5	3.31
Dustbin	138	91.39
Separate place	8	5.29
<b>Information about menstrual hygiene</b>		
Parents	61	40.39
Friends	16	10.59
Book	46	30.46
None	6	3.97
Others	22	14.56
<b>Technique to clean genitalia</b>		
Anterior to posterior	53	35.09
Posterior to anterior	5	3.31
Haphazardly	93	61.58
<b>Way of cleaning</b>		
Soap and water	133	88.07
Plane water	18	11.92
<b>Rest</b>		
No	15	9.93
Yes	136	90.06

respondents reported that they bath daily during menstrual period. Maximum number of respondents (98.01%) reported that they eat food at same place. It was found that, 83.44% of respondents used sanitary pad and 50 % of respondents changed pad twice a day.

**Table 4: Health related information of the respondents. n=151**

Health related information	Frequency (n=151)	Percent (%)
<b>Face common problem during period</b>		
No	26	17.21
Yes	125	82.78
<b>Common problems</b>		
Dysmenorrhea	68	45.03
Exclusive blood flow	34	22.51
Premenstrual symptom	49	32.45
<b>Coping strategy</b>		
Medicine	23	15.23
Diet food	34	22.51
Hot water bag	26	17.21
Rest	68	45.03

Among the respondents 99.33% did not share common pads and 96.68 % did not re use pad. Regarding disposal of Pads, 91.39 % of respondents disposed pad in dustbin, 5.29 % in separate place and 3.31% in mud. It was also found that, 40.39% of respondents learned about menstrual hygiene from parents, 10.59% from friends ,30.46% from books ,3.97 % none and 14.56 % from others. Among the respondents, 61.58% clean genitalia haphazardly while 35.09% anterior to posterior and 3.31% Posterior to anterior. Most of the respondents 88.07% use soap and water to clean genitalia.

Maximum number of respondents reported that they take rest during mensuration and 82.78% face common problems during menstruation. The common Problems they

face during menstruation were, 45.03% dysmenorrhea, 22.51% abnormal blood flow and 32.45% premenstrual symptom. To cope with common problems reported above, 45.03 % took rest, 17.21 % used hot water bag, 22.51 % had diet food, and 15.23 % of respondents took medicine.

## DISCUSSION

The findings of the study show that 56.29% were of age group 15-24 while 28.47% of 25-34 and 15.23% were above 34 years. Majority of the respondents i.e. 94.03 % were found to be unmarried. Majority of the respondents were Brahmin (31.12%) and Janajati (23.17%). Regarding educational status, 13.24% of the respondents had achieved secondary, 37.08% primary, 5.29% Higher Secondary while 27.81% were literate and 16.55 % were illiterate. Maximum number of respondents (38.41%) had disability related to lower limb. The study conducted in North India also shows similar age group of menstrual cycle [6].

In the present study disable women of Kathmandu, Nepal, the most common informant to inform about menstruation was mother. Dysmenorrhea was the commonest problem faced during menstruation (45.03%) followed by back pain and excessive blood loss. Maximum number of respondents (83.44%) used sanitary pads and frequency of changing pads twice a day was highest. Same study conducted in India and Nepal also shows same results [7-10].

In this study, maximum number of respondents (94.03%) reported that they take rest during menstruation and they are restricted to go to holy places, cooking and

touching to male as similar to the study conducted in Uttarkhand, India [3].

The use of sanitary pads and change twice a day by disabled females is only some percent high than normal female which was expected to be higher but it is different from other study [7, 12]. Only 3.31 % of respondents had taken health education class or training related to menstrual hygiene, which show the same results [6]. This shows that there is still a strong existence of misconception regarding menstruation in the society.

Out of 160 respondents of Uttarkhand, India, for cleaning purpose, (97.5%) girls used both soap and water [6]. Among the respondents, 61.58% clean genitalia haphazardly while 35.09% anterior to posterior and 3.31% Posterior to anterior. Most of the respondents 88.07% use soap and water to clean genitalia. Also, 31.78% of respondents reported they that they bath daily during menstrual period. The use of soap and water while cleaning is less.

The limitations of this study are as this is done in Urban area of Disable Rehabilitation Center, Jorpati, Kathmandu. The findings would provide base line data for future study. Based on finding further research with different design, sampling technique and size involving in rural to generalize in Nepal.

## CONCLUSION

More than one third of the respondents had disability related to lower limb. Disability by birth and accident were found to be equal while disability due to disease was found to be low. One third of the respondents reported that they bath during menstrual period. 4/5<sup>th</sup> of the respondents used sanitary pad while

nearly three fourth of respondents changed pad twice a day. Majority of the respondents disposed pad in dustbin. More than half of the respondents clean their genitalia haphazardly. Among them, majority used soap and water to clean genitalia.

Maximum number of respondents reported that they take rest during menstruation and face common problems like dysmenorrhea. It was also found that, below half of respondents learned about menstrual hygiene from parents. Only minimum number of respondents had taken health education class or training related to menstrual hygiene.

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