Original Article

Knowledge and Practice Regarding Menstrual Health among Physically Disabled Women in Kathmandu, Nepal

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ABSTRACT

Background: 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. Disability also carries stigma, so disabled people may face layers of discrimination when they are menstruating. The objective of the research is to assess the knowledge and practice regarding menstrual health of disabled women.

Method: Descriptive, cross sectional study was conducted among 151 participations. Self-structured questionnaire and face-to-face interview were used as data collection tool and technique respectively. Data entry and analysis were done using SPSS version 20. Descriptive analysis like frequency and percentages were computed and presented in a table.

Results: Most of participants knew 26-30 days were the normal menstrual cycle duration (80.13%). Only 31% of participants bath daily during menstruation. About 83% of participants used sanitary pad, 69.54% of participants changed pad twice a day. Maximum number (91.39%) disposed sanitary pad in dustbin. 76.82% of participants learned about menstrual hygiene from parents and friends. Majority of the participants (61.59%), cleaned the genitalia haphazardly 88.08% cleaned with soap and water Most of the respondent 90.06% had taken rest during menstruation.

Conclusions: Disabled women were aware about normal duration of menstrual cycle and blood loss. However**,** improper practices related to menstrual health and hygiene were prevalent among disabled women, it should be timely and rightly approached to prevent and control adverse health conditions that may arise of it. Mother and peer groups could be the best choices of source of information to improve menstrual health and hygiene of differently able women.

Keyword: Knowledge, practice, menstrual hygiene and physically disabled

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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 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 the vital physiological change that occurred in girls during adolescence which is associated with the excessive intake of Junk/Fast Food.[3] The prevailing taboos and socio-cultural prohibitions during menstruation are the determinants of adolescent girls being ignorant of scientific knowledge and practices regarding health and hygiene that are causing them to be the victim of adverse health outcomes.[4,5] Unhygienic menstrual practices may affect women's health causing vulnerability to RTI, PIDs and other complications.[6] So, hygiene related practices of women during menstruation are crucial to health[7].

According to population census 2011, nearly 2 % of total population of Nepal are disabled and among them 44% of them are female. Among these disabled female, 36 % are physically disabled.[5] Obstetrician-gynecologists encounter adolescents with disabilities in their practice. Teenagers with disabilities and their families my face complications in reproductive health issues like puberty, sexuality, and menstruation because of the concerns related to menstrual hygiene, risk of abuse and vulnerability to altered mood.[5]

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 health problems because of their knowledge and practices.

MATERIALS AND METHODS

The descriptive, cross sectional study was conducted to assess the knowledge and practice regarding menstruation health among physically disables women in Disable Rehabilitation Center, Jorpati area of Kathmandu. Sample size was calculated by using the formula (n) = $\frac{Z^2 P\,(1-P)}{d^2}$. Where, n= sample size, P= expected prevalence or proportion, d= allowable error, Z= Z statistic for a level of confidence. Putting p= 0.89 (Prevalence of knowledge regarding menstruation)[7], d= 5% = 0.05, Z= 1.96 for 95% confidence interval,1-p= 0.11 in formula the required sample size was 151. Purposive sampling technique was used to select the required sample. The study was conducted from 15 Feb to 15 March 2018. Semi-structured questionnaire was the tool and face

to face interview was the technique to collect the data. The collected data was entered and analyzed in Statistical Package for Social Science (SPSS) version 20. Descriptive analysis like frequency and percentages were computed and presented in a table.

Ethical principles were followed taking written consent from each participant and maintaining confidentiality by using an appropriate code for the identity of each participant.

RESULTS

It was found that more than half of the participants (56.29%) were of age group 15-24 years. Majority of the participants i.e. 94.03% were found to be unmarried. Nearly 74% participants followed Hindu religion. Majority of the participants were Brahmin (31.12%) followed Janajati(23.18%). Regarding educational status, 13.24% of the participants had achieved secondary, 37.09% primary, 5.30% Higher Secondary while 27.81 % were literate and 16.56% were illiterate. More than one third of participants (38.41%) had disability related to lower limb, 30.46% had upper and lower limb related disability, and 22.52% had Upper limb disability. (Table: 1.)

Table 1: Socio-demographic Characteristics of the Participants n=151

Socio-demographic characteristics	Frequency(n=151)	Percentage (%)
Age (In Years)		
15-24	85	56.29
25-34	43	28.48
>34	23	15.23
Marital status		
Unmarried	142	94.03
Married	9	5.97
Religion		
Hindu	112	74.17
Buddhist	25	16.56
Christain	14	9.27
Ethnicity		
Bhramin	47	31.12
Janajati	35	23.18
Chettri	43	28.48
Dalit	22	14.58
Other	4	2.64
Educational status		
Illiterate	25	16.56
Literate	42	27.81
Primary	56	37.09
Secondary	20	13.24
Higher Secondary	8	5.30
Type of disability		
Lower limb	58	38.41
Head neck spinal	13	8.61
Upper and lower	46	30.46
Upper limb	34	22.52

The 91.39 % of participants reported the right age of menarche. About 80% of participants reported 26-30 days as normal menstrual cycle duration. Only 3.31% of participants had taken health education class or training related to menstrual hygiene. It was found that 76.82% of participants were informed about menstruation by their parents, 10.61% by

friends whereas other sources of information were by teachers and course book. (Table: 2.)

Table 2: Knowledge Regarding Menstruation (n=151)

Knowledge Regarding Menstruation	Frequency (n=151)	Percentage (%)
Normal age of menarche		
11-15 years	138	91.39
Others	13	8.61
Normal flow of bleeding		
3-5 ml	102	67.55
5-7 ml	49	32.45
Normal menstrual cycle duration		
26-30 days	121	80.13
30-35	26	17.22
Others	4	2.65
Taken training/health education class		
No	146	96.69
Yes	5	3.31
Source of knowledge about menstruation		
Parents (mother)	116	76.82
Friends	16	10.61
Teachers	13	8.60
Course book	6	3.97

Maximum number of participants (96.69%) reported that they stayed at same place during menstruation. Also, 17% of participants reported that they bath daily during menstrual period. Maximum number of participants (98.01%) reported that they ate food at same place. It was found that, 83.44% of participants used sanitary pad and 69.54 % of participants changed pad twice a day. Among the participants, 99.34% did not share common pads and 96.69% did not reuse pad at all. Regarding disposal of pads, 91.39 % of participants disposed pad in dustbin, 5.30% in separate place and 3.31% buried in mud. Among the participants, 61.59% clean genitilia haphazardly while 35.10% anterior to posterior and 3.31% posterior to anterior. Most of the participants (88.08%) used soap and water to clean genitilia. Maximum number of participants reported that they take rest during menstruation (Table: 3.)

Table 3: Practice Regarding Menstrual Health n=151

Practice Regarding Menstrual Health	Frequency (n=151)	Percentage (%)
Stay during period		
Same place	146	96.69
Separate place	5	3.31
Time of bath		
1st day	26	17.22
4th day	65	43.05
Daily	48	31.79
Others	12	7.94
Place to eat food		
Same place	148	98.01
Outside kitchen	3	1.99
Type of pad		
Clothes	25	16.56
Sanitary pad	126	83.44
Period to change pad		
Change daily	16	10.60
Twice a day	105	69.54
Depends upon situation	30	19.86
Share common pads		
No	150	99.34
Yes	1	0.66
Reuse pad		
No	146	96.69
Yes	5	3.31
Place of pad disposal		
Buried in Mud	5	3.31
Dustbin	138	91.39
Separate place	8	5.30
Technique to clean genitilia		
Anterior to posterior	53	35.10
Posterior to anterior	5	3.31
Haphazardly	93	61.59
Cleaning genitilia with		
Soap and water	133	88.08
Plane water	18	11.92
Take rest during menstruation		
No	15	9.93
Yes	136	90.06

About 82% of disable women faced common problems during menstruation. Among them 44.80% faced dysmenorrhea, abnormal blood flow (22.40%) and premenstrual symptom (32.80%). To cope with common problems reported above, 44.80% took rest, 17.60% used hot water bag, 22.40% ate food, and 15.20% of them took medicine. (Table: 4.)

Table 4: Common Problems and Coping Strategies during Menstruation (n=151)

Health related information	Frequency(n=151)	Percentage (%)
Faced Common Problem During Period		
No	26	17.21
Yes	125	82.79
Common problems (n=125)		
Dysmenorrhea	56	44.80
Abnormal blood flow	28	22.40
Premenstrual symptom	41	32.80
Coping strategy (n=125)		
Medicine	19	15.20
Food	28	22.40
Hot water bag	22	17.60
Rest	56	45.80

DISCUSSION

The study showed that 56.29% of participants were of age group 15-24 while 28.48% of 25-34 and 15.23% were above 34 years. Majority of the participants i.e. 94.03 % were found to be unmarried. Majority of the participants were Brahmin (31.12%) followed by Chrettri (28.48%). Regarding educational status, 13.24% of the participants had achieved secondary, 37.09% primary, 5.30% Higher Secondary while 27.81% were literate and 16.56 % were illiterate. The study conducted in Chitwan district of Nepal and North India also shows similar age group of menstrual cycle as well as education level.[6,12] Maximum number of participants (38.41%) had disability related to lower limb. The study done in rural Nepal also revealed that limb disability was the most common one.[13]

In the present study the most common source of information to disabled women about menstruation health and hygiene were their mothers. This is supported by the study done in West Bengal.[3] However, the study done in rural Nepal (only 2.6% from parents) contrast to the result of our study.[11-13] Dysmenorrhea was the commonest problem faced during menstruation (44.80%) followed by premenstrual symptom and abnormal blood flow. Maximum number of participants (83.44%) used sanitary pads and frequency of changing pads twice a day was highest. Similar studies conducted in India and Nepal also shows same results.[7,9,14]

In this study, maximum number of participants (45.80%) reported that they take rest during menstruation to cope with menstrual problem. The study done in Thailand also showed that taking rest was the most common coping measures during menstrual problems.[15]

The sanitary pads were used by 83.44% of disabled women and 69.54% used to change pad twice a day which was similar to other studies.[7,12] Only 3.31% of participants had

taken health education class or training related to menstrual hygiene which resembled with the study done in rural community in Northern India.[6]

Among the participants, 61.59% clean genitilia haphazardly while 35.10% anterior to posterior and 3.31% Posterior to anterior. In our study, most of the participants (88.08%) used soap and water to clean genitilia. Out of 160 participants of Uttarkhand, India, for cleaning purpose, 97.5% girls used both soap and water.[6] However, Unicef guidance on Menstrual Health and Hygiene revealed that cleaning genitilia anterior to posterior is the correct technique and cleaning genitilia with clean water is the correct practice.[12] About 43% of disabled women take bath at 4th day of menstruation followed by 31.79% daily. However, Egyptian women take shower regularly during menstruation.[16]

Limitations: The study was conducted in Disable Rehabilitation Center, Jorpati area of Kathmandu with 151 physically disabled women; therefore, result of the study cannot be generalized for all women. The result revealed was for the study period only because it was a cross sectional study.

CONCLUSION

Large proportion of disabled women were aware about the duration of normal. menstrual cycle and amount of normal blood loss. Majority of them have improper menstrual health and hygiene practices such as bathing only in fourth day of menstruation, cleaning genitilia with soap and. water, and using wrong cleaning technique. Since, mothers and friends were the best sources of information about menstrual health and hygiene to disabled women, government and concerned organizations should provide health education through educating mothers as well as peer groups.

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