

Knowledge about Menstrual Hygiene and Practices among Adolescent Girls: A Study of Union Territory of Ladakh, India

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Abstract

Adolescence represents a transition between childhood and adulthood that is marked with many emotional and developmental changes. In females, when they reach the age of adolescence, menstruation is a physiological phenomenon that occurs as a monthly cycle. This stage is marked by physical and biological changes and sexual maturation. Menstrual hygiene involves practices during menstrual period, which can prevent various infections or gynecological problems. Instant paper attempts to examine the extent of knowledge about the menstrual hygiene and practices adopted by the tribal adolescent girls in Ladakh region of India. The study has adopted a descriptive design and has been carried out on 30 tribal rural adolescent girls between the age 13 and 19 years by using convenience sampling method. For the purpose, a questionnaire was prepared and used to collect the primary data in terms of demographic information, knowledge about menstruation and practices adopted by these females. The results revealed that most of the sampled females didn't had sufficient and scientific knowledge regarding hygienic practices like washing genital area, taking daily bath, changing absorbent, and proper disposal of the used sanitary pads etc. These findings indicated that there is an urgent need to provide education to these tribal adolescent girls about good menstrual practices to protect themselves from variety of infections of reproductive and unitary tract.

Keyword: Tribal, Menstrual Management, Menarche, Adolescence and Transition Period.

Introduction

Adolescence represents a transition between childhood and adulthood that is marked with many emotional and developmental changes. Adolescence is a critical period in life of a woman (Neupane et al., 2020).¹According to World Health Organisation (1977) adolescent group begins at the age of 10 years and extended through age 19 years. Adolescence period is commonly associated with starting of puberty and development of secondary sexual changes, and reproductive maturity (Nagar and Aimol, 2017)).²Menstruation is vaginal bleeding at an interval of about a month from the uterine endometrium (Bhattacharjee et al., 2013).³ This cycle has 3 phases- follicular phase, ovulation phase, and luteal phase. The lining of uterus gradually thickens and sheds off which results in bleeding. This bleeding continues for three to five days but in some cases, it is even up to seven days. The extent and duration of bleeding may vary from girl to girl and may change throughout the cycle (Santina, et al., 2013).⁴

In life of an adolescent girl, menarche is one of the most important events. Typically, first menstrual cycle starts between the ages of 12 and 15 years. Menarche is an important milestone that varies from region to region, race and other cultural variables (Sumpter and Torondel, 2013).⁵Adolescent girls' lives undergo a wide range of physical, physiological, and psychological changes beginning with menarche. Menarche is one of the most memorable and defining moment for adolescent girls (Dambhare

and Wagh,2012).⁶ It is a part of the maturation process that marks girl's maturity, sexual maturation and readiness for marriage. The significant changes includes growth spurt, gonadal growth, growth of secondary sexual organs, growth of respiratory, circulatory and muscular systems and changes in the body composition (Belayneh and Mekuriaw, 2019).⁷ In terms of sexual and reproductive maturity, adolescence is a formative period that affects a person's reproductive health and wellbeing for the rest of their lives.

In connection to the menstrual cycle, health is considered as a condition of physical, mental, and social wellbeing. (Hennegan, et al., 2022).⁸ The lack of information about reproductive health is an result of the cultural stereotypes that these girls face in their society and families. Eventually, the adolescent girls encounter many problems of varied nature. To deal with problems associated to menstruation, the females require access to information, education, and supportive environments. Menarche may be accompanied with taboos, beliefs, and restrictions that are part of a traditional society. These things have an adverse effect on women's menstrual health and their menstrual cleanliness. (Mouli, and Patel,2017).⁹ In Indian culture, the society have cultural, religious myths and taboos about menstruation that impact women's health adversely (Dhingra, et al., 2017).¹⁰

During menstruation, the personal hygienic practices adopted by a female are referred as menstrual hygiene. The practices such as usage of sanitary pads, washing, daily showering, frequent change of pads every 3 to 4 hours, proper disposal of sanitary products and healthy diets are essential during menstrual period (Anusree, et al.,2014).¹¹ According to United Nations, management of menstrual hygiene refers to the use of soft sanitary products and access to disposal of used sanitary materials. Scientific evidences show that constrained access to products used for maintaining hygiene lead to increased morbidity and other possibilities such as resorting to unhygienic methods and means for menstrual management. It has been established that unhygienic practices affect the health and increase the vulnerability of the girls to various infections of the reproductive tract as well as unitary tract besides serious inflammatory diseases and other complications in the pelvic region.

Evidences suggest that reproductive tract infections are 3 times higher in girls with bad menstrual practices. The effect of these infections is seriously detrimental to the health of these girls. They may develop chronic pain in the pelvic region besides painful periods, and possibility of infertility. Menstrual hygiene is very important to reduce the risk of infections among the adolescent females (Balqis, et al.,2016).¹² Thus, better menstrual hygiene practices and a greater understanding of menstruation from an early age serve to lessen millions of women's suffering. (Deshpande, et al., 2018).¹³

In most cultures, the issues related to menstruation are not discussed very openly with these girls by their parents as well as peers. As a result of which, the young girls remain ignorant of this biological function (Juyal, et al., 2012).¹⁴ In most developing countries, the management of menstrual hygiene is not an issue of priority and given insufficient acknowledgement. Adequate attention is not provided to this issue which is why the adolescent females are very vulnerable to diseases and infections during their reproductive age. For improving the reproductive health and menstrual management, the availability, accessibility, affordability and acceptability of sanitary napkins and other protection materials is very important. This will help in achieving Millennium Development Goals particularly relating to reproductive health of women (Kauret al., 2018).¹⁵ Tribal communities in India are observed as the most vulnerable and marginalized group in different aspects of their socioeconomic and cultural life. According to Census 2011, tribal people in India constitute around 8.6%. However, in Union territory Ladakh, tribal people form 90% of the total population, with eight different tribal communities namely, Beda, Boto, Changpa, Garra, Mon, Balti, Brokpa, and Purikpa.¹⁶ Till date, very few studies have been conducted around the theme of the current study. The current research has been carried out in Kargil district of Ladakh region of India

Research Objectives

- To explore social and demographic characteristics of tribal adolescent girls.
- To understand extent of knowledge about menstruation and hygiene.
- To explore practices for maintaining menstrual hygiene.

Material and Methods

Design and Sample

The study employs descriptive design. It has been carried out in Kargil district of Ladakh, India, with 1,40,802 tribal population (Census, 2011).¹⁷This district was purposively chosen based on the highest proportion of tribal population. A total of 30 rural tribal unmarried adolescent girls (13-19 years) were selected from Kargil district using convenience sampling.

Data Collection

A self-administered structured questionnaire was used for collecting the required information. The questionnaire had questions pertaining mainly to socio-demographic information, knowledge about menstruation, and hygienic practices. The specific components of questionnaire were- the terms used for menstruation, knowledge of menstruation before menarche, cause of menstruation, source of information, and personal practices adopted during the menstrual period.

Results and Discussion

Adolescence is a unique stage that is marked by a transformation of a girl into a woman. The starting point of this transition is men arche followed by a regular monthly cycle, medically referred to as menstruation. This process normally starts during the adolescent stage and is usually accompanied by changes in the anatomy and physiology of a girl. Menstrual health is an essential part of overall health of women because between menarche and menopause, most women menstruate .In some cultures such as India, menstruation is typically regarded as unclean and stigmatized practice. Hygiene practices are actions performed from menarche to menopause. Ignoring hygienic practices during menstrual period can affect reproductive health of women putting them at high risk of infections like reproductive tract infections. Therefore, good menstrual hygiene is essential to decrease the risk of infections among females. Besides, there are various factors that affect women hygienic practices influencing the ability to maintain hygiene up to an optimum expectation. Religious and cultural restrictions also put a negative impact on women hygienic practices. The aim of this research is to examine the extent of knowledge regarding menstruation and practices adopted by the tribal adolescent girls for hygiene management.

Table 1: Socio-demographic characteristic of the Respondents

Variables		Respondents (N=30)	Percentage
Age in years	13-15 year	6	20
	16-19 year	24	80
Educational Status	Illiterate	0	0
	Matriculation	5	16.67
	10+2	20	66.66
	Diploma	5	16.67
Religion	Muslim	27	90
	Buddhist	3	10
Tribal groups	Balti	10	33.33
	Purigpa	14	46.67
	Brokpa	3	10
	Bot	3	10
Father's Occupation	Govt. Employee	17	56.67
	Private Employee	1	3.33
	Business/ Self Employee	5	16.67
	Labour	7	23.33
Annual family Income (INR)	Below 50,000	13	43.33
	50,000-2 lakh	11	36.67
	2 lakh-3 lakh	6	20

The majority of respondents (80 percent) were in age group of 16-19 years while one fifth (20 respondents) belonged to the age-bracket of 13 to 15 years (Table no 1). The findings relating to age was similar to many other studies viz. Cakir, et al., (2007)¹⁷ and Singh, et al., (2008).¹⁸ Most of respondents were literate, among them 16.67 percent had completed matriculation, a little more than two third (66.66%) higher secondary and 16.67 percent were diploma holders, and none were illiterate. It is clear from the findings that the literacy of the respondents was good in the instant case. In contrast, Agarwal, et al., (2009) observed that less than two fifth (38.4%) were educated up to primary level and more than one tenth (11.4%) were illiterate.¹⁹ From the present analysis, it can be said that literate respondents were more informed about menstruation and cleanliness.

It was found that majority (90%) were Muslims by religion and the rest of 10% were Buddhist. Less than half of the participants (46.67%) belonged to Purigpa tribe, 33.33% to Balti tribe, 10% to Brokpatiribe and 10% belonged to Bot tribe. Regarding father's occupation, 56.67% of the participants' fathers were government employees, 23.33% were labourers, 16.67% were self-employees or engaged in business and 3.33% were private employees. About 43% had family income below Rs. 50,000, 36.67% between Rs. 50,000 to 2 lakhs and 20% had family income between 2 lakhs to 3 lakhs. It can be said that education and family income influence person ability to regularly maintain menstrual cleanliness.

Knowledge about Menstruation

This section narrates the extent of knowledge about menstruation among tribal adolescent girls. Awareness on the menstruation aspects would be helpful for menstruating women to monitor their menstrual cycle and to identify deviations from the normal. In this respect it would be better to know about the various aspects of menstruation like, ideal age of menarche, knowledge of menstruation and menarche, sources of information, and causes of menstruation. Table 2 describes the level of knowledge among tribal adolescent girls regarding menstruation.

Table 2: Knowledge about Menstruation among Tribal Adolescent Girls

Variables		Respondents(N=30)	Percentage
Do you have knowledge about menstruation	Yes	28	93.33
	No	2	6.67
If yes, Source of Information	Mother/Sister	9	32.14
	Friend/Relatives	6	21.42
	Teacher	5	17.86
	TV/Radio	2	7.14
	Book	3	10.72
	Social Media	3	10.72
Age at which menarche attained	11-12 year	6	20
	13-14 year	22	73.3
	15-16 year	2	6.6
Prior information about menstruation	Yes	28	93.33
	No	2	6.67
Knowledge about cause of menstruation	Yes	22	73.33
	No	8	26.67

Most of the tribal adolescent girls (93.33%) reported that they have knowledge about menstruation (Table no 2). Patel & Patel (2016) found that 84.24% had knowledge about menstruation. The higher proportion of pre-menstrual understanding in our study could be due to good literacy levels or increased socialization in rural areas. Furthermore, they received information about menstruation from multiple sources.²⁰ About one third (32.14%) reported first source of information regarding menstruation was their mother or sister whereas 21.42% girls got to know from their friends or relatives. Teachers also imparted information (17.86%) besides books (10.72%), social media (10.72%), and TV/ or radio (7.14%). These findings were in line with studies such as Sharma et al., (2008) who observed that most

common source of information regarding menstruation were mother and friend²¹ and also with the study done by Nagar and Aimol (2017) who found that friends (50%) were the main source of information about menarche, followed by mothers (36%) and aunts/relatives (19%).²² Similarly, in case of Poudel (2022) also, for about half of (51.63%) the girls in the sample, the members of family were the first source of information regarding menstruation.²³ In the present study, we noted that the teacher is not in the prominent role in imparting education about menstruation. Ameade and Garti (2016), however, had a different result. In their it was the teachers (73.4%), particularly female who acted as the first source of information²⁴

More than three fourth (77.33%) respondents attained menarche at age of 13-14 years. Similarly, Arora et al., (2013) in Haryana reported that 78% girls had their menarche at age of 13-14 years.²⁵ In case of Bhattacharjee et al., (2013), most girls (82%) reached menarche around 11 to 14 years. The study was carried out in Darjeeling district of west Bengal.²⁶ In our study, it was one fifth (20%) respondents who reached menarche around 11 and 12 years, while less than one tenth (6.66%) respondents at 15-16 years of age. In contrast, Dingra et al., (2017) in Jammu district found that 54.2% had their menarche around 10 to 12 years, while 45.8% reported their menarche around 13 and 15 years.²⁷ These variations in the age of menarche can be due to socio-economic conditions besides differences of environmental, nutritional and geographical nature.²⁸

The present analysis indicates that a great majority of respondents (93.33%) had prior information about menstruation. The findings correspond to the research by Juyal et al. (2012) in Uttarakhand that found that 64% participants had prior knowledge about menstruation before they attained menarche.²⁹ However, Joshi (2021) in Kargil district reported that 38% girls were unaware about menstruation before menarche.³⁰ Contrasting findings by Thakur et al. (2014) observed that 30 to 40% of young girls did not had any awareness on menstruation before the first flow i.e. menarche.³¹ As per this research, a great majority of respondents have prior information about menstruation, which was quite unexpected.

In our sample, quite a good number of girls (73.33%) knew about the cause of menstruation whereas 26.66% were unaware on this phenomenon. In this regard, the findings of Arungam et al. (2014) were quite similar where in it was observed that 42% participants were unaware about cause of menstruation and 58% were aware³², however, contradicts the study findings by Prajapati et al. (2015) reporting that 72% respondents were not aware about cause of menstrual bleeding.³³ Similarly, in Nagpur district, Thakre et al., (2010) found that 60% of school going girls were not aware about cause of menstruation.³⁴ Over all, in our study, the awareness of the sampled girls about cause of menstrual bleeding was fairly good. However, it can be suggested that there is a possibility of sharing more information with the respondents regarding cause of menstruation bleeding. As more than one fourth respondents were not aware, it underlines the urgency of motivating this chunk so as to enable them to cross over to the fully aware category of awareness.

Hygiene Practices during Menstruation

This section describes the tribal adolescent girl knowledge of hygiene practices during menstrual period. Menstrual cleanliness is a personal practice that involves use of sanitary products, wearing clean cloths, washing genital area, daily showering, proper usage and disposal of sanitary products. Women should change perineal pads at least every 6 hours. It is also needed that women should wash genital area and wash hand with soap after changing the perineal pads. So, good hygiene practices will help women to protect themselves from reproductive tract infections and others infections.

Table 3: Distribution of Respondents according to Menstrual Hygiene Practices

Variables	Respondents(N=30)	Percentage
Duration of Menstrual cycle	2-3 days	4 13.33
	4-5 days	12 40
	More than 5 days	14 46.67
	Old cloths	2 6.67

Type of absorbents use	Sanitary napkin	21	70
	Both	7	23.33
Reuse the absorbents	Yes	9	30
	No	21	70
Change of absorbents	4 times a day	1	3.33
	3 times a day	12	40
	2 times a day	14	46.67
	One time a day	3	10
Disposal of sanitary napkin	Dustbin	14	46.66
	Burn	2	6.67
	River	2	6.67
	Dumping	12	40
Bath during period	Yes	5	16.67
	No	25	83.33
Wash genital area during period	Yes	19	63.33
	No	11	36.67
Restriction and taboos observed during menstruation	Yes	29	96.67
	No	1	3.33

In the present study (Table no 3), 46.67% participants reported that the duration of their menstrual flow was more than five days, 40% said 4-5 days and 13.33% reported the duration to be 2-3 days. In contrast, Ahmad et al., (2021) who carried out their research in Lucknow city, observed that 54.8% participants reportedly had menstrual flow for about 3 to 5 days.³⁵

In our study, a large number of girls (70%) reported using sanitary napkins, followed by less than one fourth (23.33%) using both sanitary napkin and old cloth and rest 6.67% respondents reported using old cloth as absorbent during menstrual period. Our findings, however, were not consistent with findings of Dasgupta and Sarkar (2008) who observed that just 11.2% girls used sanitary pad³⁶; Thakre et al. (2010) in Nagpur district of Maharashtra observed that only 49% of school going girls used sanitary napkin, while 45% used old cloth as absorbents³⁷ and Poureslami and Ashtiani (2002) reported only 32% girls used pads.⁴¹ Our study finding is consistent with studies by Vayeda et al., (2021) in tribal area of Gujrat reporting 60% of girls used sanitary napkin³⁸ and Priya et al., (2017) in Puducherry showed 89% girls used sanitary napkin as absorbent and 10% used cloth and reused.³⁹ Sharma et al., (2013) found, 86.36% girls in Indore were using pads, 19% cloth and 1.7% used tampons as absorbents during menstrual period.⁴⁰ The present study showed that participant who used old cloth, 30% of them reused the absorbent during menstrual period.

The present study indicated that only 3.33% of respondents reported changing absorbents four times a day, 10% one time a day, followed by 40% changing three times a day and 46.67% changed two times a day during their menstrual period. Similarly, a study carried out by Sapkota et al. (2013) showed that 50.8% girls changed their absorbent two times a day, whereas 40.9% changed absorbent more than two times a day.⁴² However, our finding contradicts with finding of study by Joshi (2021) in Kargil district reporting 48% girls changed their absorbent once a day.⁴³

The respondents who used sanitary napkins, less than half (46.66%) of them reported disposing the used pads in dustbin, two fifth (40%) by dumping, 6.67% burn them and 6.67% reported throwing in the river. Our observations are inconsistent with the finding of Prajapatiet al., (2015) who reported that 51.5% reused the old cloth, 26% just threw the used pads and 22% disposed them in dustbin.⁴⁴

In current study, majority of the participants (83.33%) reported not taking bath till the completion of their menstrual period and about three fifth (63.33%) participants reported that they wash their genital area during menstrual period. The participants said that daily bath and washing genital area was restricted to completion of their period because of cultural taboos that bathing or washing genital area increases the

menstrual flow and pain. This finding was similar with studies by Arumgam et al., (2014) in Chennai observing only 57% women wash genital area during menstrual period⁴⁵ and Pandit et al., (2014) revealed only 33% respondents were cleaning the external genitalia during menstrual period.⁴⁶ Its opposed the finding of Kapoor and Kumar (2017) that 98% women reported cleaning genital area and having daily bath during period.⁴⁷ Poureslami and Ashtiani (2002) found only 32% take bath during period.⁴⁸

The current study reported that majority of girls (96.67%) observed restrictions and taboos during menstrual period. They were not allowed to attend religious practices like performing prayer (Nimaz) and fasting (Roza) and enter in masjid. Our findings match with Thakur et al. (2014) who found that 97% girls in the sample were not allowed to attend religious functions during menstruation⁴⁹ whereas in case of Kapoor and Kumar (2017), 98.48% participants also faced one or the other restrictions and taboos during menstruation.⁵⁰

Limitations of Research

Since, our study is confined to a select tribal region in India, generalization have to be done with care. The findings may not be representative of the menstrual practices in whole tribal area of India. Moreover, the present study results from the rural tribal areas might not be a good representative for urban tribal areas.

Conclusion

The main focus of our study was to examine the extent of knowledge and understanding of tribal adolescent girls of Kargil district in Ladakh about menstruation and the practices adopted by these girls for maintaining hygiene during this stage. We found that majority of these girls were having very little or no knowledge regarding hygienic practices on aspects such as washing genital area, taking daily bath, changing absorbent and proper disposal of used material. Cultural and religious restrictions were also contributing to ignorance of these girls regarding hygiene and management during menstruation stage. These girls suffered from reproductive tract infections (RTIs) and associated complications. It is therefore very urgent to aware and sensitize these girls about better practices for maintaining cleanliness during this stage, so that they can protect themselves from various probable infections and related problems.

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No

Conflicts of Interests

No

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