# MENSTRUAL HEALTH FRIENDLINESS OF SELECTED SCHOOLS IN KATHMANDU VALLEY 

Visible Impact

A Research Report Submitted To Nepal Health Research Council

Kathmandu, Nepal


#### Abstract

Background: Most schools in developing nations lack proper WASH facilities. Menstrual health management is hindered in schools by a number of factors, including lack of access to sanitation supplies and facilities, social isolation, lack of reliable water supplies, unfavorable toilet conditions, gender-based violence, and stigmatization of menstruation. The purpose of this study was to determine Menstrual Health friendliness of selected schools in Kathmandu Valley, Nepal. Methods: A descriptive cross-sectional study was conducted in Kathmandu Valley, Nepal among 439 students studying in grade 7-9. A total of 15 schools, 8 private and 7 public schools were selected proportionately. An average of 30 students was taken as sample from each school. Descriptive statistics like frequency and percentage was calculated for quantitative data. The association between dependent and in-dependent variables was assessed through chi-square test. Qualitative data was transcribed as per the need and the verbatim was analyzed to meaning units and thematic units and arranged according to research question. The qualitative information was then triangulated with the quantitative data collected. Results: The study reveals that the average age for the onset of the menarche was 12 years old. It was found that more than three fifth ( $69.3 \%$ ) of the girls never talk to boys about menstruation while only slightly less (61.7\%) boys talked to girls about it. $99 \%$ of the public schools had sanitary pad available inside schools while this was $85.8 \%$ for private schools. Observational findings of the study suggest that $93.33 \%$ of the schools' toilets were not disable friendly. Qualitative findings reflect that cleanliness was not prioritized by any of the schools and the girls complained that they could not go to toilets given its unsanitary condition. The association between perception of male/female teachers, male/female friends including junior/senior students and absenteeism in schools was significant at $\mathrm{p}-$ value $<0.05$. Conclusions: This study reveals that the menstrual experience of school going adolescent girls can be improved with a regular supply of water, soaps, suitable disposal facilities, a separate resting area and ageappropriate comprehensive sexuality education.


## List of Acronyms

| CPSF | Child Friendly School Framework |
| :--- | :--- |
| FGD | Focused Group Discussion |
| HIV | Human Immunodeficiency Virus |
| MHFS | Menstrual Health Friendly School |
| MHM | Menstrual Health Management |
| NGO | Non-Governmental Organizations |
| NHSMPP | National Sanitation and Hygiene Master Plan of Nepal |
| SPSS | Statistical Package for Social Sciences |
| UNICEF | United Nations Children's Fund |
| WASH | Water Sanitation and Hygiene |
| WHO | World Health Organization |

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## Chapter I: Introduction

### 1.1 Background

Menstruation is considered as one of the milestones of puberty, which is a unique event in the life of an adolescent girl (Ameade and Garti, 2016). Though it is a normal physiological process, several cultures, including Nepal, consider menstruation to be religiously impure and culturally shameful occurrence (Yadav et al., 2017). Schools can act as an important part of menstrual experience of a girl as she spends significant time of her life there. If the schools fail to meet the Water Sanitation and Hygiene (WASH) needs, attending and participating in school activities during menstruation might be difficult for her. A girl missing four days of school every four weeks may lead to her missing 10 to 20 percent of her school (Oster and Thornton, 2011). When facilities of WASH are compromised in public places such as schools, it results in school absenteeism, which in long run results in severe economic costs in the lives of the girls as well as on the country (World Bank, 2018).

Poor menstrual hygiene has also been linked with problems associated with urinary and reproductive functions (Sarah House, Thérèse Mahon, Sue Cavill, 2013). Females staying longer in schools have been associated with reduced maternal death, improved population health, increased contraceptive uptake, decreased fertility rate, improved child health, increased vaccination rates and decreased infection rates with HIV. Therefore, good menstrual hygiene is essential for the health, hygiene, education, work and well-being of women and girls (Sumpter and Torondel, 2013).

The Joint Monitoring Program of the WHO and UNICEF defines adequate menstrual hygiene management facilities in schools and health centers as those which provide privacy for changing materials and for washing hands, private parts and clothes with soap and water, includes access to water and soap within a place that provides an adequate level of privacy for washing stains from clothes and drying re-usable menstrual materials; includes disposal facilities for used menstrual materials (from collection point to final disposal) (Keatman, Cavill and Mahon, 2018).

Majority of schools in developing countries are not equipped with adequate WASH facilities which assure functionality as well as gender separation (Swedish International Development Cooperation Agency, 2016). There are many barriers which prevent menstrual health
management in schools which includes lack of access to sanitation products and facilities, lack of social support, schools' lack of access to consistent supplies of water, restrooms that are not MHM friendly, gender-based violence, and the stigmatization of menstruation (World Vision, 2019).

### 1.2 Statement of Problem

In low-income countries the basic facilities of water and sanitation are compromised making it difficult for the girls to manage their menstruation which in turn has challenged their school going abilities (Sommer, 2010). An African girl may miss up to 40 days of school per year due to menstruation. Inadequate or absence of sanitary facilities and lack of sanitary wear are the reasons for a girl to miss her schools during her period (Lindlyn, 2018). Studies show that menstruation related problems results in low class participation, decreased concentration, socializing with friends and test taking skills and homework task performance (Tegegne and Sisay, 2014). A study in Kenya noted that girls expressed difficulties attending and engaging in class due to fear of smelling, leakage and subsequent teasing and sexual harassment (Tellier and Hyttel, 2017).

Research suggests that more than one-third of girls in the South Asian region miss school for 1-3 days per month during their period (Banerji, 2018). The school to toilet ratio set out by the WHO is 1:25 and many countries in the region have a standard range in between 1:201:67. The country snapshot of Water Aid shows that, $78 \%$ of the schools in Nepal have water supply facilities. Access to toilet facilities in schools is $82 \%$ and only $69 \%$ of schools have separate toilets for girls. The toilet to school girl ratio is 1:69 (WHO Standard 1:25) (Keatman, Cavill and Mahon, 2018).

The physical infrastructure though in place is inadequate in terms of standards for the construction and location of services, the quantity/coverage levels, and the quality level of facilities. The toilets and associated structures are dirty, with no functioning locks and secure doors, hence compromising the privacy of the girls. The problem in many schools expands beyond physical infrastructure and relates to lack of systems and supply chains regarding the availability of soaps, a lack of functional hand washing facilities, body/anal cleansing materials and emergency sanitary materials. (Keatman, Cavill and Mahon, 2018).

In addition to this, lower participation in school activities, lowered concentration, and confidence as well as poorer mental and social well-being are the other impacts associated with poor MHM in schools (Keatman, Cavill and Mahon, 2018). Girls may experience the
feeling of fear, confusion and shame in class due to: leakage and dropping of sanitary material, smell and staining of clothes, teasing, fears of pregnancy, and experience of harassment by male students and teachers (Sumpter and Torondel, 2013). A study conducted in Udaypur and Sindhuli showed that girls faced challenges in terms of toilet use such as lack of consistent water supply and soap. The provisions of pain management were not in place and the girls were fearful being teased by boys and girls in case of leakage. The study also showed that most of the boys in Udaypur considered menstruation as a normal physiological process, and in Sindhuli $35 \%$ thought that menstruation was bad blood being taken out of the body. The study found that majority of the boys considered teachers as their main source of information than other sources (Morrison et al., 2016).

Research conducted in Achham, Bajura and Parsa showed that toilets in schools were often not clean or private to change the products and usually girls that left school in order to go home to change usually remained at home and did not return to school that day. Majority of the girls also reported not feeling comfortable playing sports and were uncomfortable being in classes with boys (Morrison et al., 2018).

The problem stated earlier clearly show that the schools in Nepal lack infrastructures to ensure that all girls have a healthy and safe menstruation. Most of these issues are minor however they are yet not addressed by many schools in the country. While infrastructures play an important part, the perception of the school authority as well as that of the students also play a vital role to make menstruation easier as well as dignified in the school environment. Though researches have been conducted in examining the infrastructural challenges, the perceptions still remain largely undocumented. Over the years, the government itself has drafted different policies and strategies for promotion of menstrual health in schools, and holistic data are needed to track these commitments. Therefore, there is a need for comprehensive study on menstrual health friendliness of the schools examining the infrastructural challenges as well as the school environment as a whole.

### 1.3 Research Objectives

### 1.3.1 General Objective:

- To assess the menstrual health friendliness of schools in Kathmandu Valley.


### 1.3.2 Specific Objective:

- To map the experiences regarding menstruation in schools using Journey Map tool.
- To assess the status of infrastructures, and perception of the school authorities and students, to determine the menstrual health friendliness of schools.
- To assess the association between various socio-cultural factors and menstrual health friendliness score of the schools.


### 1.4Conceptual Framework

## Independent Variables



## Figure 1: Conceptual Framework

## Chapter II: Methodology

### 2.1 Study Design

Mixed method study was used for the purpose of the research. The study comprised of both qualitative and quantitative aspects. A descriptive type of cross-sectional study was used which
involves the study of a cross-section of population and univariate analysis of the data collected. The quantitative information collected was triangulated with qualitative information.

### 2.2 Study Variables:

### 2.2.1 Dependent variables

- Menstrual Health Friendliness Score


### 2.2.2 Independent variables

- School (Type of school, Location)
- Student (Age, Academic level, Socio cultural status, Gender)


### 2.3 Study site and its justification:

Kathmandu valley was selected as a study site. Kathmandu valley has a total of 2181 schools as per the Education in Figures 2017 published by Ministry of Education, Sports and Technology. The three districts (Kathmandu, Bhaktapur, Lalitpur) of Kathmandu valley have the highest proportion of schools as well as the enrollment of students in the entire nation.

### 2.4 Study Population

The study population comprised of adolescent girls and boys enrolled in grade 7-9 in public and private schools of Kathmandu Valley for the quantitative aspect of the study. The principal or the health education teacher and adolescent girls were the study population for the qualitative aspect of the study.

### 2.5 Sample Size

No research conducted in this particular area of Kathmandu valley was found in the literature. Hence, the sample size was determined taking the value of p as 0.5 , acceptable error as $5 \%$, confidence interval of $95 \%$ and non-response rate as $10 \%$. Using the formula $n=z^{2} p q / d^{2}+10 \%$ of $n$, the sample size was calculated as 422 . The study involved a total of 439 students in total. The qualitative study involved four Focus Group Discussions (FGDs) and Journey Mapping i.e., $7 \sim 8$ participants in each FGD. The school authorities of these four schools were engaged in a key informant interview.

### 2.6 Sampling Technique

There are a total of 2181 schools in Kathmandu valley (Kathmandu, Bhaktapur and Lalitpur) districts as per the Education in Figures 2017 published by the Ministry of Education, Sports and Technology. Average 30 students were taken from 15 schools that were included in the study. The number of schools to be selected per district was determined proportionately. Eight private and seven public schools were included in the study.

As per proportion, the number of schools for each of the districts was determined. These include: Private Schools: Kathmandu- 5 Private and 4 Public Schools, Lalitpur-2 private and 2 public schools and Bhaktapur- 1 private and one public school.
Visible Impact has been conducting menstrual health management workshops under the "No Shame to Bleed" campaign. Every year a group of volunteers are recruited who conduct these workshops in different public and private schools of Kathmandu valley. The lists of schools were derived as per the technique of convenient sampling where menstrual health management workshops have already been conducted. However, seven schools were replaced as they did not provide permissions to collect data due to issues of final examinations. The students enrolled in grade 7-9 in a school were part of the quantitative study. The students were selected using stratified sampling technique. For the qualitative aspect of the study, principal of the school or in his absence health education teacher was chosen. The adolescent girls for the qualitative study included those who did not participate in the quantitative study.

The list of schools has been updated in the table.

Table 1: List of Schools

| S.N. | Type | Schools | Replaced with |  |
| :--- | :--- | :--- | :--- | :---: |
| Kathmandu |  |  |  |  |
| 1 | Private | Gorakshya Nikhil Jyoti Divya Vidyashram |  |  |
| 2 | Private | East Pole Secondary School | Mount Summit Boarding School |  |
| 3 | Private | Ambition Academy Higher Secondary School |  |  |
| 4 | Private | Holy Angels Seconday School |  |  |
| 5 | Private | Spangle Boarding School |  |  |
| 6 | Public | Mangal Madhyamik Vidhyalaya |  |  |
| 7 | Public | Vijay Smarak H. S. School | Shanti Shikshya Mandir |  |
| 8 | Public | Shree Bishwo Rastriya Madhyamik Bidhyalaya |  |  |
| 9 | Public | Shree Baishnavi Madhyamik Bidhyalaya |  |  |
| Lalitpur |  |  |  |  |
| 10 | Private | Rising Star School | People's School |  |
| 11 | Private | Shangrila International School | Kitni Secondary School |  |
| 12 | Public | Chandi Bidyashram Secondary School | Tri-ratna Co-operative School |  |
| 13 | Public | Aadarsha Saral Secondary School |  |  |
| Bhaktapur |  |  |  |  |


| 14 | Private | Glory English Boarding | Everest English School |
| :--- | :--- | :--- | :--- |
| 15 | Public | Adarsha Madhyamik Vidhyalaya | Tara Secondary School |

### 2.7 Tools and Techniques of Data Collection

Two enumerators were involved in the data collection process where the principal and coresearcher guided the qualitative aspect of the study. Self-administration of questionnaire was done in 15 schools where separate questionnaires were provided to boys and girls. Observation of the toilets in each 15 schools was conducted using observation checklist where the criteria and facilities were noted as per the checklist. For the qualitative aspect of the study two schools from Kathmandu, one each from Bhaktapur and Lalitpur (Holy Angels Public School, TriRatna Cooperative School, Tara Secondary School and Bishow Rastriya School) were selected. Key Informant Interviews were carried out in each of these schools along with a Focus Group Discussion and Journey Mapping among the girls who had not participated in the selfadministered survey.

Table 2: Tools and Techniques for Data Collection

| Tools | Population | Technique | No of sample |
| :---: | :---: | :---: | :---: |
| Self-administered semi structured questionnaire | Students of class 7-9 | Self-administration of questionnaire | 439 |
| Key Informant <br> Interview Guideline | School Authority <br> (Principal and Health <br> Education Teacher | Key Informant Interview | 4 Principals/ <br> Health Education <br> Teachers |
| Focus Group <br> Discussion Guideline | Female students | Focus Group <br> Discussion  | $4 \quad$ FGDS $\quad(7 \sim 8$ participants in each FGD $)$ |
| Observation Checklist | Schools (Toilet facilities) | Observation | 15 schools |
| Journey Map | Female students | Journey Mapping | 4 schools (7-8 participants in each school) |

### 2.8 Data Management and Analysis

Enumerators were mobilized to collect the quantitative as well as qualitative data. They were provided two days training on the research methods and tools. The collected data were coded, entered and cleaned in SPSS Version 20. Univariate analysis of the entered data was carried out and the findings were presented in the form of tables using MS Excel. Chi square was used to show the association between two variables. P value was identified to be significant at $<0.05$. Qualitative data was transcribed as per the need and the verbatim was analyzed to meaning units and thematic units and arranged according to research question. The qualitative information was then triangulated with the quantitative data collected.

### 2.9 Validity and reliability of tool

In order to ensure the validity and reliability of the study, the questionnaire was prepared through extensive literature review and was further validated by research experts of Data Shift. Data Shift is an initiative that builds the capacity and confidence of civil society organizations to use citizen-generated data to monitor sustainable development progress, demand accountability and campaign for transformative change. The tool was pre-tested among $10 \%$ of total purposed sample with equal proportion of males and females, and feedbacks were incorporated as necessary. Journey map was used for the first time in research especially in the study of menstrual health and hygiene in Nepal. Though the tool has never been used in Nepal, it can be really useful to document the experiences of girls in regards to the different experiences they have in a classroom setting. The tool is usually used to document a customer's journey of buying a product from a company to identify the different gaps present in the marketing strategy. The tool has been modified to capture the different experiences in regards to menstruation in a classroom setting as the topic of menstruation is usually discussed in silence and may result in hesitancy and reluctance in speaking about it.

### 2.10 Inclusion and exclusion criteria

### 2.10.1 Inclusion criteria:

- Adolescent boys and girls belonging to grade 7-9 of private as well as public schools of Kathmandu valley.
- The school authorities of selected schools were interviewed for qualitative aspect of the study.


### 2.10.2 Exclusion criteria:

- Those who refused to give consent were not included in the study.
- The students below grade seven were not included in the study.
- Girls who had not yet had menarche were excluded.


### 2.11 Ethical Guidelines

- Ethical approval was taken from Nepal Health Research Council.
- Written as well verbal consent was taken from all the participants before their participation in the study.


### 2.12 Limitation of the study:

The study was only limited to Kathmandu Valley. The result obtained from the study may be generalized in other metropolitan cities of the country, but may not be generalizable for the rural parts of the country, and regions with specific norms on menstruation, such as Sudurpaschim province where chaupadi is prevalent.

## Chapter III: Findings

## 3. 1 Socio-demographic and socio-economic characteristics of participants

Most of the respondents belonged to the age group between 10-15 years. The mean age of both boys and girls was 14 years. The minimum age of both boys and girls was 11 years while 20 was the maximum age for girls and 17 for boys. This similarity in age is because the respondents were of similar class. Most of the students belonged to Janjati ethnicity. In regard to religion, more than $70 \%$ of the participants were Hindus followed by Buddhist. On the basis of presence or absence of five items (television, mobile phone, computer, electric heater and refrigerator) the boys and girls were classified as belonging to high, medium and lower-class categories. The participants with all the items were categorized into group high, with 3-4 items as medium class and those with 2 and less than 2 as belonging to lower class. $34.2 \%$ of the girls belonged to category high while $34.6 \%$ of the boys belonged to category high.

Table 3: Socio demographic and Socio-economic Characteristics

| Age-group | Girls n (\%) |  | Boys n (\%) |
| :--- | :--- | :--- | :--- |
| 10-15 years | $203(90.2 \%)$ |  | $188(87.9 \%)$ |
| 16-21 years | $22(9.7 \%)$ |  | $26(12.1 \%)$ |
| Caste |  |  |  |
| Brahmin | $35(15.6 \%)$ |  | $38(18 \%)$ |
| Chhetri | $40(17.8 \%)$ |  | $102(23.2 \%)$ |
| Janajati | $117(52 \%)$ |  | $11(5.2 \%)$ |
| Dalit | $20(8.9 \%)$ | $11(5.2 \%)$ |  |
| Others | $13(5.8 \%)$ |  | $170(79.4 \%)$ |
| Religion |  |  | $3(1.4 \%)$ |
| Hindu | $168(74.7 \%)$ |  | $24(11.2 \%)$ |
| Muslim | $2(0.9 \%)$ |  | $16(7.5 \%)$ |
| Buddhist | $32(14.2 \%)$ |  | $1(0.5 \%)$ |
| Christian | $22(9.8 \%)$ |  | $70(32.7 \%)$ |
| Others | $1(0.4 \%)$ |  | $72(33.6 \%)$ |
| Class |  |  |  |
| 7 | $73(32.4 \%)$ |  |  |
| 8 |  |  |  |


| 9 | $77(34.2 \%)$ |  | $72(33.6 \%)$ |
| :--- | :--- | :--- | :--- |
| Type of School |  |  |  |
| Public/Community | $105(46.7 \%)$ |  | $90(43 \%)$ |
| Private | $120(53.3 \%)$ |  | $122(57 \%)$ |
| Economic Status |  |  | $74(34.6 \%)$ |
| High | $76(34.2 \%)$ |  | $56(26.2 \%)$ |
| Low | $62(27.1 \%)$ |  | $84(39.3 \%)$ |
| Middle | $87(38.7 \%)$ |  |  |

### 3.2 Age of Menarche

The average age for the onset of the menarche was 12 years old. The maximum age of menarche was 15 years old and the minimum was 10 years old.

### 3.3 Issues related to menstruation

### 3.3.1. Talking with classmates about menstruation

Almost seventy percentage of the girls responded that they never talk to boys about menstruation while $61.7 \%$ of the boys also said the same. None of the girls mentioned to have frequently talked to boys about menstruation while 2 out of 212 boys responded that they frequently talked to girls about it.

Table 4: Talking with classmates about menstruation

| Girls talking toboys <br> classmates <br> about <br> menstruation | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Never | 79 | 77 | 156 |
|  | $65.8 \%$ | $73.3 \%$ | $69.3 \%$ |
| Rarely | 6 | 2 | 8 |
|  | $5.0 \%$ | $1.9 \%$ | $3.6 \%$ |
| Sometimes | 31 | 23 | 54 |
|  | $25.8 \%$ | $21.9 \%$ | $24.0 \%$ |


| Boys talking to girls about <br> menstruation | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Never | 78 | 54 | 132 |
|  | $63.9 \%$ | $58.7 \%$ | $61.7 \%$ |
| Rarely | 15 | 1 | 16 |
|  | $12.3 \%$ | $1.1 \%$ | $7.5 \%$ |
| Sometimes | 19 | 31 | 50 |
|  | $15.6 \%$ | $33.7 \%$ | $23.4 \%$ |
| Often | 10 | 4 | 14 |
|  | $8.2 \%$ | $4.3 \%$ | $6.5 \%$ |
| Frequently | 0 | 2 | 2 |
|  | $0 \%$ | $2.2 \%$ | $0.9 \%$ |

### 3.3.2 Comfort during menstruation at school

Almost half of the participants answered as feeling comfortable during periods while 31.6 \% answered as feeling just fine. When boys were asked about how comfortable the girls feel during their menstruation in schools, more than one fourth of the boys ( $29 \%$ ) responded that the girls felt uncomfortable during their periods in schools while only $10.7 \%$ of them responded that the girls felt very comfortable.

Table 5: Comfort during Menstruation at School

| Comfort during menstruation at school <br> (Girls' perspectives) | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very Uncomfortable | 7 | 3 | 10 |
|  | $5.80 \%$ | $2.90 \%$ | $4.40 \%$ |
| Uncomfortable | 5 | 23 | 28 |
|  | $4.20 \%$ | $21.90 \%$ | $12.40 \%$ |
| Just Fine | 46 | 25 | 71 |
|  | $38.30 \%$ | $23.80 \%$ | $31.60 \%$ |
| Comfortable | 60 | 51 | 111 |
|  | $50.00 \%$ | $48.60 \%$ | $49.30 \%$ |
| Strongly comfortable | 2 | 3 | 5 |
|  | $1.70 \%$ | $2.90 \%$ | $2.20 \%$ |


| Comfort during menstruation at school <br> (Boys perspectives) | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very uncomfortable | 24 | 13 | 37 |
|  | $19.70 \%$ | $14.10 \%$ | $17.30 \%$ |
| Uncomfortable | 26 | 36 | 62 |
|  | $21.30 \%$ | $39.10 \%$ | $29.00 \%$ |
| Just fine | 32 | 20 | 52 |
|  | $26.20 \%$ | $21.70 \%$ | $24.30 \%$ |
| Comfortable | 25 | 15 | 40 |
|  | $20.50 \%$ | $16.30 \%$ | $18.70 \%$ |

The girls who responded as feeling uncomfortable or very uncomfortable due to their periods pointed out the following recommendations to enhance their menstruation experience in school:

- Organizing of trainings in schools so that they can openly talk about menstruation.
- Creating an environment free from teasing so that they can feel comfortable during their periods.
- Management of infrastructural facilities such as clean toilets, sanitary napkins, adequate water and dustbins.


### 3.3.3 Infrastructures

### 3.3.3.1 Separate Toilet for Girls

All of the schools had separate toilet for girls. All of the schools had doors in the toilets.

### 3.3.3.2 Lockable doors

More than $80 \%$ of the doors of both public and private schools were lockable.

Table 6: Presence of lockable doors in toilets

| Lockable Doors | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 104 | 98 | 202 |
|  | $86.70 \%$ | $93.30 \%$ | $89.80 \%$ |
| No | 16 | 7 | 23 |
|  | $13.30 \%$ | $6.70 \%$ | $10.20 \%$ |


| Total | 120 | 105 | 225 |
| :--- | :--- | :--- | :--- |
|  | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |

### 3.3.3.3 Dustbin to throw away used Sanitary Napkins

Almost $90 \%$ of the participants' respondent that the schools had dustbins to throw away used sanitary napkins. All girls in private schools responded they had dustbins to throw away used sanitary napkins while only $80 \%$ of those in public schools responded that they had dustbins.

Table 7: Presence of dustbins

| Dustbins | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 120 | 82 | 202 |
|  | $100.00 \%$ | $78.10 \%$ | $89.80 \%$ |
| No | 0 | 21 | 21 |
|  | $0.00 \%$ | $20.00 \%$ | $9.30 \%$ |
| Don't Know | 0 | 2 | 2 |
|  | $0.00 \%$ | $1.90 \%$ | $0.90 \%$ |
| Total | 120 | 105 | 225 |
|  | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |

### 3.3.3.4 Other methods of disposal of used sanitary napkins

Most of the girls who responded that they had no dustbins to throw away used sanitary napkins, mentioned that they took home and threw the used pads. "We wrap the used pad in a newspaper, put it in a plastic bag and then take it back home." (Age, 14 Kathmandu)

### 3.3.4 WASH Facilities

### 3.3.4.1 Water to wash hands

Overall, 96.9 percent of the girls responded that they had access to water to wash hands inside their schools.

Table 8: Accessibility of water to wash hands

| Water to wash hands | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 120 | 98 | 218 |
|  | $100.00 \%$ | $93.30 \%$ | $96.90 \%$ |


| No | 0 | 7 | 7 |
| :--- | :--- | :--- | :--- |
|  | $0.00 \%$ | $6.70 \%$ | $3.10 \%$ |
| Total | 120 | 105 | 225 |
|  | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |

### 3.3.4.2 Soap to wash hands

While most of the girls responded that they had access to water facilities but only 57.7 percent of the girls said that they had access to soap to wash hands. More girls from public schools responded to having soaps than those from private schools.

Table 9: Availability of soap to wash hands

| Soap to wash hands | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 64 | 65 | 129 |
|  | $53.3 \%$ | $61.9 \%$ | $57.3 \%$ |
| No | 52 | 35 | 87 |
|  | $43.3 \%$ | $33.3 \%$ | $38.7 \%$ |
| Don't Know | 4 | 5 | 9 |
|  | $3.3 \%$ | $4.8 \%$ | $4.0 \%$ |
| Total | 120 | 105 | 225 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.5 Menstrual Health and Hygiene Management

### 3.3.5.1 Medicine within the school in case of menstrual pain and excessive bleeding

Only 46.7 percentage of the girls responded they had medicine available inside their schools in case of pain and excessive bleeding.

Table 10: Availability of medicine within school for managing pain and excessive bleeding

| Medicine | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 62 | 43 | 105 |
|  | $51.7 \%$ | $41.0 \%$ | $46.7 \%$ |
| No | 46 | 32 | 78 |
|  | $38.3 \%$ | $30.5 \%$ | $34.7 \%$ |
| Don't Know | 12 | 30 | 42 |


|  | $10.0 \%$ | $28.6 \%$ | $18.7 \%$ |
| :--- | :--- | :--- | :--- |
| Total | 120 | 105 | 225 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.5.1.1 Management of pain and bleeding while lack of medicine

The girls who responded that they had no facilities of pain management in schools said that they go to their homes in case of extreme pain. Also, few of them said that will bear the pain and try to manage it by drinking warm water in the school.

### 3.3.5.2 Availability of sanitary napkins within schools

More than 90 percent of the girls responded that sanitary napkins were available inside schools which was almost 99 percent for public school while it was 85.8 percent for private schools.

Table 11: Availability of sanitary napkins

| Sanitary Napkins | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 103 | 104 | 207 |
|  | $85.8 \%$ | $99.0 \%$ | $92.0 \%$ |
| No | 15 | 1 | 16 |
|  | $12.5 \%$ | $1.0 \%$ | $7.1 \%$ |
| Don't Know | 2 | 0 | 2 |
|  | $1.7 \%$ | $0.0 \%$ | $.9 \%$ |
| Total | 120 | 105 | 225 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.5.2.1 Free availability of pad

Out of those who said that sanitary napkins were available, only 45.6 percent said that it was available for free. More than half of the participants ( $60.6 \%$ ) belonging to public schools responded as the pads available in the schools were free comparatively to those participants of public schools.

Table 12: Free availability of pad

| Sanitary Napkins | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Free | 31 | 63 | 94 |


|  | $30.40 \%$ | $60.60 \%$ | $45.60 \%$ |
| :--- | :--- | :--- | :--- |
| Paid | 71 | 41 | 112 |
|  | $69.60 \%$ | $39.40 \%$ | $54.40 \%$ |
|  | 102 | 104 | 206 |
|  | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |

### 3.3.5.2.2 Price of the sanitary napkin

The average price of the sanitary napkins was stated as Rs. 9.27 with SD 2.437 with minimum price being Rs. 5 and maximum Rs. 15 .

### 3.3.5.2.3 Management of sanitary pads at schools in absence of its availability

Out of those who said that there was no management of sanitary pads at schools, more than half of the girls ( $60 \%$ ) responded that they would ask their friends if sanitary napkins were not available within schools.

Table 13: Management of sanitary pads at schools in absence of its availability

| Management of sanitary pads at schools in absence of <br> its availability | Frequency | Percentage |
| :--- | :--- | :--- |
| Buy from shop | 1 | 10 |
| I ask help with my friends and sisters. | 1 | 10 |
| I ask with my friends. | 6 | 60 |
| I go home. | 1 | 10 |
| We ask with our friends or buy it. | 1 | 10 |

### 3.3.5.3 Number of toilets

More than half of the girls belonging to both public and private schools agreed to the statement that their schools had adequate number of toilets. On an average $74.8 \%$ of the girls responded to their schools having adequate number of toilets.

Table 14: Presence of adequate number of toilets in schools

| Adequate number of toilets in schools | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Strongly Disagree | 6 | 8 | 14 |
|  | $5.0 \%$ | $7.6 \%$ | $6.2 \%$ |


| Disagree | 9 | 11 | 20 |
| :--- | :--- | :--- | :--- |
|  | $7.5 \%$ | $10.5 \%$ | $8.9 \%$ |
| Neutral | 22 | 7 | 29 |
|  | $18.3 \%$ | $6.7 \%$ | $12.9 \%$ |
| Agree | 58 | 50 | 108 |
|  | $48.3 \%$ | $47.6 \%$ | $48.0 \%$ |
| Total | 25 | 29 | 54 |
|  | $20.8 \%$ | $27.6 \%$ | $24.0 \%$ |
|  | 120 | 105 | 225 |

### 3.3.5.3.1. Cleanliness of Toilets

To the question if the toilets in schools were clean, most of the respondents answered as neutral, disagree and strongly disagree in comparison to them answering as strongly agree and agree to the statement that the toilets were clean. On average $63.4 \%$ of the girls responded that the toilets were adequately clean.

Table 15: Adequate cleanliness of toilets

| The toilets for girls are usually clean | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Strongly Disagree | 13 | 9 | 22 |
|  | $10.8 \%$ | $8.6 \%$ | $9.8 \%$ |
| Disagree | 13 | 34 | 47 |
|  | $10.8 \%$ | $32.4 \%$ | $20.9 \%$ |
| Neutral | 38 | 10 | 48 |
|  | $31.7 \%$ | $9.5 \%$ | $21.3 \%$ |
| Agree | 43 | 34 | 77 |
|  | $35.8 \%$ | $32.4 \%$ | $34.2 \%$ |
| Total | 13 | 18 | 31 |
|  | $10.8 \%$ | $17.1 \%$ | $13.8 \%$ |

### 3.3.5.4 Availability of water facilities

Overall, more than half of the girls agreed that their schools had water facilities. More students from private schools agreed that their schools had adequate water facilities than those from public schools. On average $76.2 \%$ of the girls responded that the schools had adequate water facilities.

Table 16: Presence of adequate availability water facilities in the school

| There are adequate water facilities in <br> the school | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |
| Strongly Disagree | 3 | 4 | 7 |
|  | $2.5 \%$ | $3.8 \%$ | $3.1 \%$ |
| Disagree | 5 | 27 | 32 |
|  | $4.2 \%$ | $25.7 \%$ | $14.2 \%$ |
| Neutral | 11 | 18 | 29 |
|  | $9.2 \%$ | $17.1 \%$ | $12.9 \%$ |
| Agree | 62 | 31 | 93 |
|  | $51.7 \%$ | $29.5 \%$ | $41.3 \%$ |
| Strongly Agree | 39 | 25 | 64 |
|  | $32.5 \%$ | $23.8 \%$ | $28.4 \%$ |
|  | 120 | 105 | 225 |

### 3.3.5.5 Use of toilets

In response to how would they use the toilets during their periods if they answered as strongly disagree and disagree to the statements related to adequacy of toilets and water facilities including its cleanliness, the respondents have stated a number of ways of using toilets. Seeking help from their friends and teachers to use the toilets, using it despite being dirty, few even responded to using teacher's toilets and majority of them said that they would stay home instead of going to schools.
Table 17: Use of toilets if unsatisfied

| If unsatisfied, use of toilets | Frequency | Percent |
| :--- | :--- | :--- |


| By taking the help of my friends or teachers. | 2 | 12.5 |
| :--- | :--- | :--- |
| I don't go to school at that time. I stay at home. | 9 | 56.25 |
| I use the same unclean toilet and use bottled water for <br> handwashing if there is no water in the toilet. | 2 | 12.5 |
| I use the teachers' toilet. | 3 | 18.75 |
| Total | 16 | 100 |

### 3.3.6 Perceptions

### 3.3.6.1 Perception of male teacher/ staffs at school

More than 60 percentage of the girls responded that they never felt uncomfortable by the behavior of any male teacher/staffs with $19.1 \%$ of them saying sometimes. On average $80.6 \%$ of the girls responded that they were never made uncomfortable by their teachers.

Table 18: Perception of male teachers/staffs

| Perception of Male teachers/ staffs | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very often | 5 | 7 | 12 |
|  | $4.2 \%$ | $6.7 \%$ | $5.3 \%$ |
| Often | 14 | 12 | 26 |
|  | $11.7 \%$ | $11.4 \%$ | $11.6 \%$ |
| Sometimes | 13 | 30 | 43 |
|  | $10.8 \%$ | $28.6 \%$ | $19.1 \%$ |
| Rarely | 5 | 0 | 5 |
|  | $4.2 \%$ | $0.0 \%$ | $2.2 \%$ |
| Total | 83 | 56 | 139 |
|  | $69.2 \%$ | $53.3 \%$ | $61.8 \%$ |
|  | 120 | 105 | 225 |

### 3.3.6.2 Perception of female teacher/staffs at school

More than $80 \%$ of girls responded as never being uncomfortable due to the behavior of any female teacher/staffs at school. On average $91.2 \%$ of the girls responded that they were not made uncomfortable by their female teachers.

Table 19: Perception of female teacher/staffs

| Perception of Female <br> teacher/staffs | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very Often | 1 | 9 | 10 |
|  | $.8 \%$ | $8.6 \%$ | $4.4 \%$ |
| Often | 2 | 5 | 7 |
|  | $1.7 \%$ | $4.8 \%$ | $3.1 \%$ |
| Sometimes | 12 | 2 | 14 |
|  | $10.0 \%$ | $1.9 \%$ | $6.2 \%$ |
| Rarely | 10 | 3 | 13 |
|  | $8.3 \%$ | $2.9 \%$ | $5.8 \%$ |
| Never | 95 | 86 | 181 |
|  | $79.2 \%$ | $81.9 \%$ | $80.4 \%$ |
|  | 120 | 105 | 225 |

### 3.3.6.3 Perception of male friends/students

More than half of the girls responded never $(56 \%)$ while $14.7 \%$ said sometimes and $11.6 \%$ of the girls as very often feeling uncomfortable due to the behavior of male friends/students. On an average $80.2 \%$ of the girls responded that the boys did not make them uncomfortable.

Table 20: Perception of male friends/students

| Perception of Male friends/students | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very Often | 12 | 14 | 26 |
|  | $10.0 \%$ | $13.3 \%$ | $11.6 \%$ |
| Often | 7 | 6 | 13 |
|  | $5.8 \%$ | $5.7 \%$ | $5.8 \%$ |
| Sometimes | 17 | 16 | 33 |
|  | $14.2 \%$ | $15.2 \%$ | $14.7 \%$ |
| Rarely | 16 | 11 | 27 |
|  | $13.3 \%$ | $10.5 \%$ | $12.0 \%$ |
|  | 68 | 58 | 126 |
|  | $56.7 \%$ | $55.2 \%$ | $56.0 \%$ |


|  | 120 | 105 | 225 |
| :--- | :--- | :--- | :--- |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.6.4 Perception of female friends/students

More than 70 percentage of the girls responded that they never felt uncomfortable due to their female friends while $8.4 \%$ responded as sometimes. On an average $87 \%$ of the respondents shared that their female friends did not make them uncomfortable.

Table 21: Perception of female friends/students

| Perception of female friends | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |
| Very Often | 6 | 10 | 16 |
|  | $5.0 \%$ | $9.5 \%$ | $7.1 \%$ |
| Often | 3 | 8 | 11 |
|  | $2.5 \%$ | $7.6 \%$ | $4.9 \%$ |
| Sometimes | 11 | 8 | 19 |
|  | $9.2 \%$ | $7.6 \%$ | $8.4 \%$ |
| Rarely | 10 | 3 | 13 |
|  | $8.3 \%$ | $2.9 \%$ | $5.8 \%$ |
| Never | 90 | 76 | 166 |
|  | $75.0 \%$ | $72.4 \%$ | $73.8 \%$ |
|  | 120 | 105 | 225 |

### 3.3.6.5 Perception of senior/junior students

More than $65 \%$ of the girls responded as never feeling uncomfortable due to their senior/junior students with $21.3 \%$ responding as sometimes. On an average $4.31 \%$ respondents shared that the senior/junior students did not make them uncomfortable.
Table 22: Perception of senior/junior students

| Perception of Senior/Junior Students | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very Often | 1 | 1 | 2 |
|  | $.8 \%$ | $1.0 \%$ | $.9 \%$ |
| Often | 6 | 1 | 7 |


|  | $5.0 \%$ | $1.0 \%$ | $3.1 \%$ |
| :--- | :--- | :--- | :--- |
| Sometimes | 23 | 25 | 48 |
|  | $19.2 \%$ | $23.8 \%$ | $21.3 \%$ |
| Rarely | 11 | 9 | 20 |
|  | $9.2 \%$ | $8.6 \%$ | $8.9 \%$ |
| Never | 79 | 69 | 148 |
|  | $65.8 \%$ | $65.7 \%$ | $65.8 \%$ |
|  | 120 | 105 | 225 |

### 3.3.7 Absenteeism in school

In response to the question how has the fact that someone made you feel uncomfortable during your periods affected you being absent in schools, more students ( $70 \%$ ) belonging to private school responded as never comparatively to only about $46.7 \%$ from public schools. On an average $4.09 \%$ of the respondents shared that the discomfort did not affect on their absenteeism in schools.

Table 23: Absenteeism in school

| Absenteeism in Schools | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very Often | 2 | 2 | 4 |
|  | $1.7 \%$ | $1.9 \%$ | $1.8 \%$ |
| Often | 4 | 14 | 18 |
|  | $3.3 \%$ | $13.3 \%$ | $8.0 \%$ |
| Sometimes | 27 | 38 | 65 |
|  | $22.5 \%$ | $36.2 \%$ | $28.9 \%$ |
| Rarely | 3 | 2 | 5 |
|  | $2.5 \%$ | $1.9 \%$ | $2.2 \%$ |
|  | 84 | 49 | 133 |
|  | $70.0 \%$ | $46.7 \%$ | $59.1 \%$ |
|  | 120 | 105 | 225 |

### 3.3.8 Influence in studies

In response to the question- how has the fact that someone made you feel uncomfortable during your periods affected your studies in schools, more students ( $60.8 \%$ ) from private schools responded as never in comparison to those from public schools (44.8\%). On an average $4.11 \%$ of the respondents shared that that the discomfort did not influence their academics.

Table 24: Influence in academics

| Hampered academics | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Very Often | 1 | 1 | 2 |
|  | $.8 \%$ | $1.0 \%$ | $.9 \%$ |
| Often | 5 | 14 | 19 |
|  | $4.2 \%$ | $13.3 \%$ | $8.4 \%$ |
| Sometimes | 19 | 32 | 51 |
|  | $15.8 \%$ | $30.5 \%$ | $22.7 \%$ |
| Rarely | 22 | 11 | 33 |
|  | $18.3 \%$ | $10.5 \%$ | $14.7 \%$ |
|  | 73 | 47 | 120 |
|  | $60.8 \%$ | $44.8 \%$ | $53.3 \%$ |
|  | 120 | 105 | 225 |

### 3.3.9 Participation in extracurricular activities

In response to the question- how has the fact that someone made you feel uncomfortable during your periods affected your participation in extracurricular activities, $21 \%$ of the participants responded as often compared to $6.7 \%$ of the participants of private schools. On an average $3.63 \%$ of the respondents shared that the discomfort did not affect their participation in extracurricular activities in schools.

Table 25: Participation in extra-curricular activities

| Extra-curricular participation | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |
| Very Often | 2 | 7 | 9 |
|  | $1.7 \%$ | $6.7 \%$ | $4.0 \%$ |


| Often | 8 | 22 | 30 |
| :--- | :--- | :--- | :--- |
|  | $6.7 \%$ | $21.0 \%$ | $13.3 \%$ |
| Sometimes | 41 | 36 | 77 |
|  | $34.2 \%$ | $34.3 \%$ | $34.2 \%$ |
| Rarely | 17 | 11 | 28 |
|  | $14.2 \%$ | $10.5 \%$ | $12.4 \%$ |
|  | 52 | 29 | 81 |
|  | $43.3 \%$ | $27.6 \%$ | $36.0 \%$ |
|  | 120 | 105 | 225 |

### 3.3.10 Participation in workshop/trainings related to menstruation

Only $40 \%$ of the girls responded to have participated in a training related to menstruation. More girls from private schools responded to have participated in a training or workshop related to menstruation. Only few of the respondents mentioned the name of the organizations responsible for conduction of MHM workshops/trainings, that included Women LEAD Nepal and Unnati Foundation.

Most of them answered that they learnt about menstruation, different problems associated with menstruation, the ways to manage them and specifically mentioned pad making an integral part of the trainings.

Table 26: Participation in workshop/training related to menstruation

| Participation in workshop/training <br> related to menstruation | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes |  |  | 90 |
|  | $54.2 \%$ | $23.8 \%$ | $40.0 \%$ |
| No | 55 | 80 | 135 |
|  | $45.8 \%$ | $76.2 \%$ | $60.0 \%$ |
|  | 120 | 105 | 225 |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.11 Perceptions of boys on Menstrual Health Management

### 3.3.11.1 Heard about Menstruation

More than three fourths of the boys ( $78.5 \%$ ) responded to have heard about menstruation. The students from private schools responded more as yes compared to those of public schools. Most of the boys have described menstruation as a process which is biological while some have also stated it as a problem which occurs among girls. There are varied responses where boys have described it as starting as early as 12 years to 17 years for a period of even 14 to 18 days They have also described it socio-culturally stating that it is a time where girls should not worship gods or are untouchable. Some of them have also mentioned it as a health problem where girls need to keep themselves clean and they suffer from pain. Few of them have also directly mentioned as blood flowing from reproductive organ while few have mentioned it as blood flowing from other part such as buttocks and frequently mentioned it being the flow of impure blood.

Table 27: Boys hearing about menstruation

| Heard about Menstruation | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 107 | 61 | 168 |
|  | $87.7 \%$ | $66.3 \%$ | $78.5 \%$ |
| No | 15 | 31 | 46 |
|  | $12.3 \%$ | $33.7 \%$ | $21.5 \%$ |
| Total | 122 | 92 | 214 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.11.2 Sources of Information

Most of the boys responded as schools, teachers and their books as the major source of information about menstruation. They also mentioned family members and their girl classmates as the source of information about menstruation.

### 3.3.12 Responses of boys

### 3.3.12.1 Seen a girl in your school carrying sanitary napkin in her hands

Most of the boys responded that they had not seen a girl in the school carrying sanitary napkin in her hands. Out of those who answered yes, most of them responded that their friends would either react normally or ignore it while few also mentioned that they would laugh.
"I once saw the pad in a bag and my friend laughed saying "sanitary pad"". (Public School,

## Kathmandu)

Table 28: Seen a girl in school carrying sanitary napkins in her hands

| Seen a girl in your school carrying <br> sanitary napkin in her hands. | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes |  | 6 | 24 |
|  | $14.8 \%$ | $6.5 \%$ | $11.2 \%$ |
| No | 104 | 86 | 190 |
|  | $85.2 \%$ | $93.5 \%$ | $88.8 \%$ |
| Total | 122 | 92 | 214 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.12.2 Seen that a girl has left bloodstains in the school bench

More than ninety percentage of the boys responded as they had not seen a girl leaving blood stains in her school bench. Out of those who responded as yes most of the boys answered that their friends would tell it to the girl classmates' other friend so that they can clean it.

Table 29: Seen a girl leaving blood stains in school bench

| Seen that a girl has left bloodstains in <br> the school bench | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes | 14 | 1 | 15 |
|  | $11.5 \%$ | $1.1 \%$ | $7.0 \%$ |
| No | 108 | 91 | 199 |
|  | $88.5 \%$ | $98.9 \%$ | $93.0 \%$ |
|  | 122 | 92 | 214 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.12.3 Seen a girl classmate saying that she is suffering from pain in the uterus

More than half of the boys responded that they had seen a girl classmate saying that she is suffering from pain in the uterus. Most of the boys who said yes, mentioned that their friends would inform the teachers that she is suffering from pain. Some of them also responded to suggesting them to take rest and drink hot water. Few of them also pointed out that they would suggest them to go home and to a clinic.

Table 30: Seen a girl classmate saying she is suffering from pain in the uterus

| A girl classmate saying that she is <br> suffering from pain in the uterus | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes |  |  | 113 |
|  | $52.5 \%$ | $53.3 \%$ | $52.8 \%$ |
| No | 58 | 43 | 101 |
|  | $47.5 \%$ | $46.7 \%$ | $47.2 \%$ |
| Total | 122 | 92 | 214 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.12.4 Requesting a male friend to buy her a sanitary napkin

Majorly, i.e. 86.4 percentage of the boys said that none of the girls had ever requested them to buy them a sanitary napkin. Out of those who said yes, most stated that his friend might buy it without any hesitation and few of them have stated that they might ask other people such as sister (school helper) or teacher to buy the pads for her.

Table 31: Requesting male friend to buy her a sanitary napkin

| Requesting a male friend to buy her <br> a sanitary napkin | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Yes |  | 11 | 29 |
|  | $14.8 \%$ | $12.0 \%$ | $13.6 \%$ |
| No | 104 | 81 | 185 |
|  | $85.2 \%$ | $88.0 \%$ | $86.4 \%$ |
| Total | 122 | 92 | 214 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.13 Attitude regarding Menstruation

### 3.3.13.1 Menstruation is a dirty thing

Only 13 out of 214 boys agreed to the statement about menstruation being a dirty thing.

Table 32: Attitude on whether menstruation is a dirty thing

| Menstruation is a dirty thing. | Private | Public | Total |
| :--- | :--- | :--- | :--- |
| Strongly Agree | 2 | 3 | 5 |
|  | $1.6 \%$ | $3.3 \%$ | $2.3 \%$ |
| Agree | 4 | 4 | 8 |
|  | $3.3 \%$ | $4.3 \%$ | $3.7 \%$ |
| Neutral | 11 | 1 | 12 |
|  | $9.0 \%$ | $1.1 \%$ | $5.6 \%$ |
| Disagree | 30 | 38 | 68 |
|  | $24.6 \%$ | $41.3 \%$ | $31.8 \%$ |
| Total | 75 | 46 | 121 |
|  | $61.5 \%$ | $50.0 \%$ | $56.5 \%$ |

### 3.3.13.2 I don't like talking about it all

More students were likely to remain neutral to the statement or disagree to it.

Table 33: Attitude on whether participants like talking about menstruation

| I don't like talking about it all. | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |
| Strongly Agree | 7 | 6 | 13 |
|  | $5.7 \%$ | $6.5 \%$ | $6.1 \%$ |
| Agree | 20 | 24 | 44 |
|  | $16.4 \%$ | $26.1 \%$ | $20.6 \%$ |


| Disagree | 47 | 28 | 75 |
| :--- | :--- | :--- | :--- |
|  | $38.5 \%$ | $30.4 \%$ | $35.0 \%$ |
| Strongly Disagree | 15 | 18 | 33 |
|  | $12.3 \%$ | $19.6 \%$ | $15.4 \%$ |
|  | 122 | 92 | 214 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.3.13.3 It is a natural process

Most of the boys agreed to the statement of menstruation being a natural process.

Table 34: Attitude on whether menstruation is a natural process

| It is a natural process. | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |
| Strongly Agree | 68 | 51 | 119 |
|  | $55.7 \%$ | $55.4 \%$ | $55.6 \%$ |
| Agree | 46 | 33 | 79 |
|  | $37.7 \%$ | $35.9 \%$ | $36.9 \%$ |
| Neutral | 1 | 4 | 5 |
|  | $.8 \%$ | $4.3 \%$ | $2.3 \%$ |
| Disagree | 3 | 2 | 5 |
|  | $2.5 \%$ | $2.2 \%$ | $2.3 \%$ |
| Strongly Disagree | 4 | 2 | 6 |
|  | $3.3 \%$ | $2.2 \%$ | $2.8 \%$ |
|  | 122 | 92 | 214 |

### 3.3.13.5 I respect girls for menstruation

Only few disagreed and most of the boys agreed to the statement.

Table 35: Attitude of boys to respect girls for menstruation

| I respect girls for menstruation | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |


| Strongly Agree | 51 | 25 | 76 |
| :--- | :--- | :--- | :--- |
|  | $41.8 \%$ | $27.2 \%$ | $35.5 \%$ |
| Agree | 52 | 46 | 98 |
|  | $42.6 \%$ | $50.0 \%$ | $45.8 \%$ |
| Neutral | 9 | 16 | 25 |
|  | $7.4 \%$ | $17.4 \%$ | $11.7 \%$ |
| Disagree | 6 | 4 | 10 |
|  | $4.9 \%$ | $4.3 \%$ | $4.7 \%$ |
|  | 4 | 1 | 5 |
|  | $3.3 \%$ | $1.1 \%$ | $2.3 \%$ |
|  | 122 | 92 | 214 |

### 3.3.13.6 It is everybody's concern

Most of the boys agreed to the statement.

Table 36: Attitude of boys in regards to whether they agree on statement that menstruation is everybody's concern

| It is everybody's concern | Type of School |  | Total |
| :--- | :--- | :--- | :--- |
|  | Private | Public |  |
| Strongly Agree | 82 | 56 | 138 |
|  | $67.2 \%$ | $60.9 \%$ | $64.5 \%$ |
| Agree | 36 | 29 | 65 |
|  | $29.5 \%$ | $31.5 \%$ | $30.4 \%$ |
| Neutral | 0 | 3 | 3 |
|  | $0.0 \%$ | $3.3 \%$ | $1.4 \%$ |
| Disagree | 0 | 4 | 4 |
|  | $0.0 \%$ | $4.3 \%$ | $1.9 \%$ |
| Strongly Disagree | 4 | 0 | $4.9 \%$ |
|  | $3.3 \%$ | $0.0 \%$ | 214 |
|  | 122 | 92 | $100.0 \%$ |

### 3.3.14 Attitudinal Scores

The five statements from question number 6 have been weighted with 1 as minimum score and 5 as maximum. On the basis of median (21) attitudinal scores are classified into high and low. More than half of the boys of both public as well as private schools had positive attitudinal score. A significant association has been found between attitudinal scores and the class of the students.

Table 37: Attitudinal Scores on basis of schools

| Category of Attitudinal Scores | Public/ community school | Private | Total |
| :--- | :--- | :--- | :--- |
| Low | 43 | 49 | 92 |
|  | $46.70 \%$ | $40.20 \%$ | $43.00 \%$ |
| High | 49 | 73 | 122 |
|  | $53.30 \%$ | $59.80 \%$ | $57.00 \%$ |

Table 38: Attitudinal Scores on basis of classes

|  | Class of students |  |  | Chi- <br> square | D.F. | P- <br> value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Category of Attitudinal Scores | 7 | 8 | 9 | 17.834 a | 2 | 0.000 |
| Low | 42 | 32 | 18 |  |  |  |
|  | $60.00 \%$ | $44.40 \%$ | $25.00 \%$ |  |  |  |
| High | 28 | 40 | 54 |  |  |  |
|  | $40.00 \%$ | $55.60 \%$ | $75.00 \%$ |  |  |  |
| Total | 70 | 72 | 72 |  |  |  |
|  | $100.00 \%$ | $100.00 \%$ | $100.00 \%$ |  |  |  |

### 3.4 Infrastructural, Perceptional and Menstrual Health-Friendly Scores

### 3.4.1 Infrastructural Scores

Infrastructural Scores were calculated on the basis of observation of infrastructures by researchers and responses of the girls. The calculation of observational score involved the addition of 15 variables making the maximum attainable score as 75 . On the basis of the median 54, the observational scores were categorized as those above 54 as high and below 54 as low. The calculation of perceived infrastructural scores involved the addition of 10 variables making
the maximum attainable scores as 50. It was also further categorized into low and medium on the basis of the median (40.70)

The average observational score was 40.24 , SD with 7.86 as minimum score as 35 and maximum as 65 . The average perceived infrastructural score was 40.24 with SD 5.06 with minimum score as 30.47 and maximum as 47.56 . Similar proportions of schools were categorized as low ( $46.7 \%$ ) and high (53.3\%) in as per observation and perceptions.

Table 39: Infrastructural scores

| Observed | Private | Public/Community | Total |
| :--- | :--- | :--- | :--- |
| Low | 4 | 3 | 7 |
|  | $50.00 \%$ | $42.90 \%$ | $46.70 \%$ |
| High | 4 | 4 | 8 |
|  | $50.00 \%$ | $57.10 \%$ | $53.30 \%$ |
| Perceived |  |  |  |
| Low | 3 | 4 | 7 |
|  | $37.50 \%$ | $57.10 \%$ | $46.70 \%$ |
| High | 5 | 3 | 8 |
|  | $62.50 \%$ | $42.90 \%$ | $53.30 \%$ |

Composite infrastructural scores were calculated on the basis of the average scores of the responses of girls as per the schools and the scores from observations. The calculation involved the addition of 19 variables in total with a high score of 5 and low score of 0 making the maximum attainable score as 95 . The average score was calculated as 68.73 . The scores were classified into two categories high and low on the basis of the median score 69.27. It was further ranked into low (less than 69.27) and above 69.27 as high.

A total of 7 schools were categorized into low scorer and a total of 8 schools fell into the category of high scorer.

Table 40: Composite scores of schools

| Composite Scores | Private | Public/Community | Total |
| :--- | :--- | :--- | :--- |
| Low | 4 | 3 | 7 |
|  | $50.00 \%$ | $42.90 \%$ | $46.70 \%$ |


| High | 4 | 4 | 8 |
| :--- | :--- | :--- | :--- |
|  | $50.00 \%$ | $57.10 \%$ | $53.30 \%$ |
|  | 8 | 7 | 15 |

### 3.4.2 Perceptional scores

Perceptional scores were calculated on the basis of 5 questions. The scores were weighted as Very often -1 to Never-5 making the total score to 25 . Average score was calculated as 21.27. It was further categorized into the two categories low and medium on the basis of the median score 21.87. Similarly, as per the infrastructural scores, 7 schools were categorized as low and 8 as high.

Table 41: Perceptional scores

| Perceptional <br> Scores | Private | Public/Community | Total |
| :--- | :--- | :--- | :--- |
| Low | 3 | 4 | 7 |
|  | $37.5 \%$ | $57.1 \%$ | $46.7 \%$ |
| High | 5 | 3 | 8 |
|  | $62.5 \%$ | $42.9 \%$ | $53.3 \%$ |
| Total | 8 | 7 | 15 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.4.3 Composite Menstrual Health Friendly Scores

Composite MHFS Score was calculated by addition of Perceptional and Infrastructural scores with the highest attainable score as 120 . The median score was 91.13 which was ranked into high- more than and equals to 91.13 to 120 and low as 91.13 to 0 . The mean score is 90.01 and median is 91.13 .

Table 42: Composite MHFS Scores

| Composite MHFS <br> scores | Private | Public/Community | Total |
| :--- | :--- | :--- | :--- |
| Low | 5 | 2 | 7 |
|  | $62.5 \%$ | $28.6 \%$ | $46.7 \%$ |
| High | 3 | 5 | 8 |


|  | $37.5 \%$ | $71.4 \%$ | $53.3 \%$ |
| :--- | :--- | :--- | :--- |
| Total | 8 | 7 | 15 |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

### 3.5 Observational Findings

All of the schools had separate toilets for girls and boys and all of the 15 schools had doors. All of the toilets were within the school compound. Almost all of the toilets had locks. However, in 3 of the schools not all of the locks of every toilet was functional. Out of 15, 13 schools had no facilities of soap. Eight out of fifteen toilets of the schools were not clean. The toilets which were dirty had visible presence of urine and feces as well as distinct smell in some toilets. Two schools had no container for disposal of sanitary napkins. Only 9 containers had lids. Most of the schools had no mirrors. None of the school had derogatory graffiti. Most of the schools had the system of Municipal waste disposal and two schools had incinerators. Six out of fifteen schools had functioning lights. Only one of the schools was disability friendly.

Table 43: Observational findings

| Locks in the Toilets | Frequency | Percent |
| :--- | :--- | :--- |
| Present | 13 | 86.7 |
| Absent | 2 | 13.3 |
| Total | 15 | 100 |
| Presence of soap |  |  |
| Present | 2 | 13.3 |
| Absent | 13 | 86.7 |
| Cleanliness of toilets | 7 | 46.7 |
| Present | 8 | 53.3 |
| Absent | 13 |  |
| Container for disposal of sanitary napkins |  | 86.7 |
| Present | 2 | 13.3 |
| Absent | 9 | 60 |
| Container with lid | 6 | 40 |
| Present |  |  |
| Absent |  |  |


| Presence of Mirror |  |  |
| :--- | :--- | :--- |
| Present | 2 | 13.3 |
| Absent | 13 | 86.7 |
| Final disposal |  |  |
| Municipal waste disposal | 13 | 86.7 |
| Incinerator | 2 | 13.3 |
| Presence of functioning lights | 6 |  |
| Presence | 9 | 40 |
| Absence |  | 60 |
| Disability Friendly Toilet | 1 | 6.66 |
| Presence | 14 | 93.33 |
| Absence |  |  |

### 3.6 Journey Mapping

### 3.6.1 Seeking Permissions from teachers while using the toilet

More than half of the girls were comfortable while seeking permissions from teachers to use the toilet. Most of the girls responded that they would normally ask for permissions just like other times. Some of them however responded that they would use other excuses to use the toilet.

Instead of directly asking permission for using the toilet I ask permission to drink water. (14 years, Class 9, Kathmandu, Public School)

I tell my friend initially if I have periods and ask her to call the teacher and only will ask permission to go to toilet. (14 years, Class 9, Bhaktapur, Public School)
Among those who described they had problems to seek permission, most of them stated that they had difficulty in standing up, difficulties in asking permission to a male teacher and also scared and even shy to ask for permission.
"I feel difficult to stand up because it flows heavily." (14 years, Class 9, Kathmandu, Public School)
"When there is no female teacher, I feel difficult to ask." (14 years, Classs 8, Kathmandu, Private School)

Table 44: Comfort level, actions and problems while seeking permission to go toilets

| Comfort Level | Frequency | Percent |
| :--- | :--- | :--- |


| Very comfortable | 5 | 15.6 |
| :--- | :--- | :--- |
| Comfortable | 17 | 53.1 |
| Uncomfortable | 9 | 28.1 |
| Very uncomfortable | 1 | 3.1 |
| Actions |  |  |
| Normally | 26 | 81.3 |
| Privately ask permission | 3 | 9.4 |
| Tell friend and seek her help to ask for permission | 2 | 6.3 |
| Using other excuses to use toilet | 1 | 3.1 |
| Problems | 5 |  |
| Difficulty in standing up | 1 | 15.6 |
| Difficulty to ask permission to a male teacher | 1 | 3.1 |
| I want to go toilet without asking for permission. | 2 | 6.3 |
| No any problem | 22 | 68.8 |
| Scared | 1 | 3.1 |
| Shy | 1 | 3.1 |

### 3.6.2 Using toilets during menstruation

More than half of the girls were comfortable in using toilets during menstruation. Mixed responses on using toilets during menstruation were given by the participants. Though most of them said that they used it normally some of them said they didn't use the toilets in schools during menstruation and also during other times. This response was mainly attributed to the students of Public School of Kathmandu who also responded in FGDs that they didn't use the toilets at all.

## I don't use toilet in schools. 13, Class 9, Kathmandu,Public School

I usually use the toilets with the help of my friends because the doors do not lock. 14, Class 9, Bhaktapur, Public School

A number of infrastructural challenges were stated by the girls as problems to use toilets which mainly includes the lack of facilities of water and dustbin

Table 45: Emotions, actions and problems while using toilet during menstruation

| Emotions | Frequency | Percent |
| :--- | :--- | :--- |
| Very comfortable | 4 | 12.5 |
| Comfortable | 18 | 56.3 |
| Uncomfortable | 9 | 28.1 |
| Very Uncomfortable | 1 | 3.1 |
| Total | 32 | 100 |
| Actions |  |  |
| Bring paper | 1 | 3.1 |
| Bucket fill | 2 | 6.3 |
| Carry Pads | 10 | 6.3 |
| Don't Use |  | 31.3 |
| Problems | 3 | 9.4 |
| Lack of water | 2 | 6.3 |
| Long queue | 4 | 12.5 |
| No dustbin | 3 | 9.4 |
| No dustbin and water | 17 | 53.1 |
| No Problem | 1 | 3.1 |
| Scared | 1 | 3.1 |
| Shyness | 1 | 3.1 |
| The locks don't work |  |  |

### 3.6.3 Leakage and staining

Out of 32,22 girls responded as feeling uncomfortable and very uncomfortable during leakage and staining in schools. Most of the girls responded to covering the dress with the help of a jacket while they also responded as washing it and changing the dress.
I go back to my house and change the dress. Age 15, Class 9, Bhaktapur, Public School

I tie a shawl around my hip, make the straps of my bag long and go home. Age 14, Class 9, Kathmandu, Private School

Girls described different emotions as their problems. Feeling scared, shy and uncomfortable. Also fear of teasing was stated by the girls.

I ask my teacher to go back to my home but I feel uncomfortable to go back alone. Age 15, Class 8, Bhaktapur, Public School

I feel shy to tie the jacket in the hip, teachers don't allow us to tie in the hip. Age 14, Class 8,

## Kathmandu, Private School

I feel bad to stand up and feel sad. Age 14, Class 8, Kathmandu, Private.

Ifeel scared while walking in the road. I feel like people will tease me. Age 14, Class 8, Public School, Kathmandu.
I feel scared my friends will tease me. Age 15, Class 9, Public School, Kathmandu,
Table 46: Comfort level, actions taken and problems during leakage and staining

| Comfort Level | Frequency | Percent |
| :--- | :--- | :--- |
| Very comfortable | 1 | 3.1 |
| Comfortable | 2 | 6.3 |
| Uncomfortable | 22 | 68.8 |
| Very uncomfortable | 7 | 21.9 |
| Actions taken | 5 |  |
| Change dress at home | 2 | 15.6 |
| Change pads | 9 | 6.3 |
| Cover stains with jacket | 5 | 28.1 |
| Go home | 1 | 15.6 |
| No stains | 8 | 3.1 |
| Wash with water | 2 | 25 |
| Wrap a scarf | 3 | 6.3 |
| Problems | 2 | 9.4 |
| Fear of teasing | 7 | 6.3 |
| Feeling bad | 9 | 3.1 |
| Feeling uncomfortable to go home alone | 1 | 21.9 |
| No Problem | 8 | 28.1 |
| Scared | 1 | 25 |
| Shy | 3.1 |  |
| Shy and Scared |  |  |


| Uncomfortable | 1 | 3.1 |
| :--- | :--- | :--- |

### 3.6.4 Changing pads and disposing them

None of the girls responded to feeling very uncomfortable. Most of them responded to saying that they change it normally and throw it in the disposal points.

The school has good system for changing the pads and for disposal. We have an incinerator to dispose them off. Age 13, Class 8, Public School, Bhaktapur.
Folding the used pad, covering it in the newspaper cover and disposing it in a dustbin. Age

## 14, Class 9, Private School, Kathmandu.

Some of them however stated that they did not change in schools as the school had no dustbins. I change my pads in my house. Class 9, Age 14, Public School, Kathmandu,

A number of problems from dustbins being full, to have to stand in queues was described by the girls.

Sometimes, dustbins are full and difficulty to throw. Age 14, Class 9, Private School, Kathmandu,

Sometimes there may be large queues which cause leakage in our clothes. Age 14, Class 8, Private School, Kathmandu

Table 47: Comfort level, actions and problems while changing pads and disposing them

| Comfort level | Frequency | Percent |
| :--- | :--- | :--- |
| Very comfortable | 7 | 21.9 |
| Comfortable | 15 | 46.9 |
| Uncomfortable | 10 | 31.3 |
| Actions |  |  |
| No changing in schools, no dustbin | 7 | 21.9 |
| Throw in dustbin | 13 | 40.6 |
| Throw in incinerator | 4 | 12.5 |
| Throw pad in dustbin or incinerator | 3 | 9.4 |
| Wrapping in paper and disposing them off | 5 | 15.6 |
| Problems |  |  |
| Difficulty if forget to bring | 1 | 3.1 |


| Dustbin full | 2 | 6.3 |
| :--- | :--- | :--- |
| No dustbin | 7 | 21.9 |
| No problem | 20 | 62.5 |
| Queue | 1 | 3.1 |
| Scared | 1 | 3.1 |

### 3.6.5 In case of menstrual cramps and pain

More than sixty percentage of the girls responded to feeling uncomfortable and very uncomfortable. Amongst the girls who responded that they had stomach cramps during their periods, they responded to drinking hot water, taking medicine and also pain killer.'
"First day, I get stomach cramps. I put my head down and sleep. Drink hot water. If I get extreme pain, I tell my teacher and take rest. "Age 15, Class 9, Public School Bhaktapur,
"I take rest and drink water and take pain killer in case of much pain." Bhaktapur, Class 9,

## Age 16, Public School

"Putting the bag and pushing in stomach." Age 14, Class 9, Private school, Kathmandu
A number of problems due to menstrual cramps were listed by the girls who include water being dirty for them to drink, difficulties in studying and even using clothes such as jackets to ease the pain.

I feel extreme pain. If we had hot bag, it would have been easier. Bhaktapur, 14, Class 9, Public

Table 48: Comfort level, actions and problems during menstrual cramps and pain

| Comfort Level | Frequency | Percent |
| :--- | :--- | :--- |
| Very comfortable | 2 | 6.3 |
| Comfortable | 6 | 18.8 |
| Uncomfortable | 17 | 53.1 |
| Very uncomfortable | 7 | 21.9 |
| Actions |  |  |
| Take Painkiller | 5 | 15.6 |
| Buy medicine | 1 | 3.1 |
| Don't feel like doing anything | 1 | 3.1 |
| Drink hot water | 2 | 6.3 |
| Drink water and take pain killer | 5 | 15.6 |


| No pain | 9 | 28.1 |
| :--- | :--- | :--- |
| Putting the bag and pushing in stomach | 1 | 3.1 |
| Rest and drink hot water | 3 | 9.4 |
| Take rest and go home | 3 | 9.4 |
| Tying cloth around | 2 | 6.3 |
| Problems |  |  |
| Difficulty in studying | 5 | 15.6 |
| Drinking water is dirty | 1 | 3.1 |
| No problem | 22 | 68.7 |
| Painful cramps | 2 | 6.3 |
| Tying jacket to ease pain | 2 | 6.3 |

### 3.6.6 Asking for pads with the school authority

$34.4 \%$ of the girls said they were uncomfortable to ask for pads while 31.3 percentages of them responded to being comfortable. Most of the girls said that they will ask pads normally. Some of them also said they were shy. Among those who described as having problems to ask for pads, most of them described as it was not their choice of pads and feeling shy to ask pads.

I say girls' problem and ask for pad. Age 12, class 7, Community School, Lalitpur

I tell my friends and ask pads for them by whispering in their ears. 8, 14, Community School,

## Lalitpur

I tell my Sir, girl problem then he will give us the pads. Age 8, 13, Public School, Kathmandu

Table 49: Comfort level, actions and problems while asking for pads with school authority

| Comfort Level | Frequency | Percent |
| :--- | :--- | :--- |
| Very Comfortable | 6 | 18.8 |
| Comfortable | 10 | 31.3 |
| Uncomfortable | 11 | 34.4 |
| Very uncomfortable | 5 | 15.6 |
| Actions |  |  |
| Asking pads to a teacher | 4 | 12.5 |


| Asking pads to female teacher | 8 | 25 |
| :--- | :--- | :--- |
| Asking pads to friends | 7 | 21.9 |
| Buy from a medical store | 2 | 6.3 |
| Never asked | 2 | 6.3 |
| Normally | 1 | 3.1 |
| Pay money and take pad | 2 | 6.3 |
| School authorities do not have pads | 1 | 3.1 |
| Shy | 3 | 9.4 |
| Use alternative words to ask for pads | 2 | 6.3 |
| Problems |  |  |
| Feel scared | 1 | 3.1 |
| Feel shy | 8 | 25 |
| No money | 2 | 6.3 |
| No problem | 16 | 50 |
| Not my choice of pads | 5 | 15.6 |

### 3.7 Cross-Tabulation between Absenteeism and Perceptions

Significant association was found between perception of male /female teachers, male/female friends including junior/senior students and absenteeism in schools with P -vaue $<0.05$

Cross tabulation between perception of male teachers/staffs and absenteeism in schools showed that , among those who responded as often and sometimes being absent most of them responded as being absent likewise. Though only few responded as being uncomfortable due to their female teachers, among those who responded as often almost half of them (47\%) responded as most likely to remain absent.

Table 50: Cross-Tabulation between Absenteeism and Perception of male teacher/staffs

Table 51: Cross tabulation between absenteeism and perception of friends

Among those who have answered often being uncomfortable by female friends, most have responded as often and sometimes that they are likely to remain absent while most of those

| Absenteeism | Female Friends |  |  | Chi-square | df | P-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Often | Sometimes |  |  |  |
| Never | 118 | 9 | 11 | $17.842^{\text {a }}$ | 4 | . 001 |
|  | 65.9\% | 33.3\% | 57.9\% |  |  |  |
| Absenteeism | 48 |  |  |  |  |  |
| Sometimes in Schools | Perception of <br> 26.8\%\% | Male teac | her/staffs | Chi-square | Df | P-value |
| Often <br> Never | 18ever | Often | Sometimes | $11.953^{\text {a }}$ | 4 | . 018 |
|  | 7.1.3\% | 29.6\% | 5.3\% |  |  |  |
| Never | Mate Friends | 47.4\% | 46.5\% |  |  |  |
| Sometimes <br> Never | n ${ }^{\text {ever }}$ | Often | S6metimes |  |  |  |
|  | 123.9\% | 24R.1\% | B7.2\% | $13.587^{\text {a }}$ | 4 | . 009 |
| Often <br> Sometimes | 6713\% | 5B.8\% | 42.4\% |  |  |  |
|  | 47.6\% | 110.5\% | 118.3\% |  |  |  |
| Absenteeism | 26.8\% | 25.6\% | 42.4\% |  | df | P-value |
|  | Perception of | Female tea | cher/staffs | Chi-square |  |  |
| in schools | 9 | 8 | 5 |  |  |  |
| Often | Never | Often | Sometimes |  |  |  |
|  | 5.9\% | 20.5\% | 15.2\% |  |  |  |
| Never | 124 | 5 | 9 | $21.599^{\text {a }}$ | 4 | . 000 |
|  | 153 | 39 | 33 |  |  |  |
|  | $\begin{aligned} & 63.9 \% \\ & 100.0 \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 294 \% \\ & 100.0 \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 6430 \% \\ & 100.0 \% \\ & \hline \end{aligned}$ |  |  |  |
| Sometimes | 56 | 5 | 4 |  |  |  |
|  |  |  |  |  |  |  |
|  | 28.9\% | 29.4\% | 28.6\% |  |  |  |
| Often | 14 | 7 | 1 |  |  |  |
|  | 7.2\% | 41.2\% | 7.1\% |  |  |  |
|  | 194 | 17 | 14 |  |  |  |
|  | 100.0\% | 100.0\% | 100.0\% |  |  |  |

who have responded as never have also responded as never being absent. The participants who
have answered as often being uncomfortable due to their male friends more them half of them responded as never being absent. More than $80 \%$ of participants who responded as often being uncomfortable by their senior/junior students also responded as often and sometimes having their studies affected.

### 3.8 Cross Tabulation between Influence in studies and Perceptions

Significant associations were found between influence in studies and perceptions of male/female teachers, male/female students and senior/junior students with p value less than 0.05 .

Out of those participants who responded as often being uncomfortable by male teachers and staffs most of them responded as their academics being never hampered. The participants who have responded as often feeling uncomfortable due to a female teacher most of them have responded as never ( $41.2 \%$ ) being absent.

Table 52: Cross tabulation between influence in studies and perceptions of teachers

| Influence in | Perception Male teacher |  |  | Chi-square | Df | P-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Often | Sometimes |  |  |  |
| Never | 107 | 25 | 21 | $12.853^{\text {a }}$ | 4 | . 012 |
|  | 74.3\% | 65.8\% | 48.8\% |  |  |  |
| Sometimes | 29 | 7 | 15 |  |  |  |
|  | 20.1\% | 18.4\% | 34.9\% |  |  |  |
| Often | 8 | 6 | 7 |  |  |  |
|  | 5.6\% | 15.8\% | 16.3\% |  |  |  |
| Influence in studies | Perception of female teacher |  |  |  |  |  |
|  | Never | Often | Sometimes |  |  |  |
| Never | 137 | 7 | 9 | $13.775^{\text {a }}$ | 4 | . 008 |
|  | 70.6\% | 41.2\% | 64.3\% |  |  |  |
| Sometimes | 44 | 5 | 2 |  |  |  |
|  | 22.7\% | 29.4\% | 14.3\% |  |  |  |
| Often | 13 | 5 | 3 |  |  |  |


|  | $6.7 \%$ | $29.4 \%$ | $21.4 \%$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

In response to feeling uncomfortable often and sometimes due to a male friend in almost equal percentage the participants have responded as never ( $61.5 \%$ ) and often ( $60.6 \%$ ). The girls who have responded as feeling often uncomfortable due to their girl classmates most of them have also responded as their academics being hampered as never and sometimes in almost equal proportion.

Table 53: Cross tabulation between influence in studies and perception of friends

| Influence <br> in studies | Perception of Male Friends |  |  | Chi-square | Df | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Never | Often | Sometimes |  |  |  |
| Never | 109 | 24 | 20 | $17.512^{\mathrm{a}}$ | 4 | .002 |
|  | $71.2 \%$ | $61.5 \%$ | $60.6 \%$ |  |  |  |
| Sometimes | 35 | 5 | 11 |  |  |  |
|  | $22.9 \%$ | $12.8 \%$ | $33.3 \%$ |  |  |  |
| Often | 9 | 10 | 2 |  |  |  |
|  | $5.9 \%$ | $25.6 \%$ | $6.1 \%$ |  |  |  |
| Influence <br> in studies | Perception of Female Friends |  |  |  |  |  |
|  | Never | Often | Sometimes |  |  |  |
| Never | 130 | 11 | 12 | $12.153^{\mathrm{a}}$ | 4 | .016 |
|  | $72.6 \%$ | $40.7 \%$ | $63.2 \%$ |  |  |  |
| Sometimes | 34 | 11 | 6 |  |  |  |
|  | $19.0 \%$ | $40.7 \%$ | $31.6 \%$ |  |  |  |
| Very Often | 15 | 5 | 1 |  |  |  |

Very few students responded as often feeling uncomfortable due to senior/junior students. Among those who responded as often uncomfortable mostly responded as sometimes and often their academics being affected.

Table 54: Cross tabulation between influence in studies and perception of Junior/Senior

| Influence in <br> studies | Perception of Junior/Senior Students |  |  | Chi-square | df | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Never | Often | Sometimes |  |  |  |
| Never | 121 | 2 | 30 | $13.874^{\text {a }}$ | 4 | .008 |
|  | $72.0 \%$ | $22.2 \%$ | $62.5 \%$ |  |  |  |
| Sometimes | 32 | 4 | 15 |  |  |  |
|  | $19.0 \%$ | $44.4 \%$ | $31.3 \%$ |  |  |  |
| Often | 15 | 3 | 3 |  |  |  |
|  | $8.9 \%$ | $33.3 \%$ | $6.3 \%$ |  |  |  |
|  | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |  |  |  |

### 3.9 Crosstabs between participation in extracurricular activities and perceptions

Significant association was found between participation in extracurricular activities and perceptions and perceptions of male/female teachers, male/female students and senior/junior students with p value less than 0.05 .
More than eighty percentages of the girls responding as often being uncomfortable due to their male teachers have responded as their participation in extracurricular activities being affected as sometimes and often. While in response to the girls being uncomfortable due to their female teachers almost $70 \%$ of the girls have responded as their participation in extracurricular being activities being affected often.

Table 55: Cross tabulation between participation in extracurricular activities and perception of teachers

| Extracurricular <br> Activities | Perception Male teacher |  |  | Chi-square | Df | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Never | Often | Sometimes |  |  |  |
| Never | 90 | 7 | 12 | $45.695^{\mathrm{a}}$ | 4 | .000 |
|  | $62.5 \%$ | $18.4 \%$ | $27.9 \%$ |  |  |  |
| Sometimes | 44 | 19 | 14 |  |  |  |


|  | $30.6 \%$ | $50.0 \%$ | $32.6 \%$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Often | 10 | 12 | 17 |  |  |  |
|  | $6.9 \%$ | $31.6 \%$ | $39.5 \%$ |  |  |  |
| Extracurricular <br> Activities | Perceptions of female teacher |  |  |  |  |  |
|  | Never | Often | Sometimes |  |  |  |
| Never | 104 | 4 | 1 | $50.344^{\mathrm{a}}$ | 4 | .000 |
|  | $53.6 \%$ | $23.5 \%$ | $7.1 \%$ |  |  |  |
| Sometimes | 65 | 1 | 11 |  |  |  |
|  | $33.5 \%$ | $5.9 \%$ | $78.6 \%$ |  |  |  |
| Very Often | 25 | 12 | 2 |  |  |  |

Out of those who have responded as often and sometimes being uncomfortable due to their male friends most have responded as sometimes and often. Similar responses were observed in terms of feeling uncomfortable due to their female friends.

Table 56: Cross tabulation between participation in extracurricular activities and perception of friends

| Extracurricular <br> Activities | Perception of Male Friends |  |  | Chi-square | Df | P-value |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Often | Sometimes |  |  |  |  |  |  |  |  |  |
| Never | 82 | 12 | 15 | $9.015^{\mathrm{a}}$ | 4 | .061 |  |  |  |  |  |  |
|  | $53.6 \%$ | $30.8 \%$ | $45.5 \%$ |  |  |  |  |  |  |  |  |  |
| Sometimes | 49 | 15 | 13 |  |  |  |  |  |  |  |  |  |
|  | $32.0 \%$ | $38.5 \%$ | $39.4 \%$ |  |  |  |  |  |  |  |  |  |
| Very Often | 22 | 12 | 5 |  |  |  |  |  |  |  |  |  |
|  | $14.4 \%$ | $30.8 \%$ | $15.2 \%$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | Perception of Female Friends |  |  |  |
|  | Never | Often | Sometimes |  |  |  |  |  |  |  |  |  |


| Never | 100 | 6 | 3 | $42.745^{\mathrm{a}}$ | 4 | .000 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $55.9 \%$ | $22.2 \%$ | $15.8 \%$ |  |  |  |
| Sometimes | 59 | 6 | 12 |  |  |  |
|  | $33.0 \%$ | $22.2 \%$ | $63.2 \%$ |  |  |  |
| Very Often | 20 | 15 | 4 |  |  |  |
|  | $11.2 \%$ | $55.6 \%$ | $21.1 \%$ |  |  |  |

The girls who have responded as being often uncomfortable have answered mainly as often and sometimes their participation in extracurricular activities being affected.

Table 57: Cross tabulation between participation in extracurricular activities and perception of Junior/Senior

| Extracurricular <br> Activities | Perception of Junior Students |  |  | Chi-square | Df | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Never | Often | Sometimes |  |  |  |
| Never | 97 | 1 | 11 | $24.071^{\mathrm{a}}$ | 4 | .000 |
|  | $57.7 \%$ | $11.1 \%$ | $22.9 \%$ |  |  |  |
| Sometimes | 49 | 5 | 23 |  |  |  |
|  | $29.2 \%$ | $55.6 \%$ | $47.9 \%$ |  |  |  |
| Very Often | 22 | 3 | 14 |  |  |  |
|  | $13.1 \%$ | $33.3 \%$ | $29.2 \%$ |  |  |  |

### 3.10 Qualitative Findings

There were majorly three themes discussed within the focus group discussions conducted in 4 schools. These themes were the infrastructural facilities available in their schools for management of menstruation, the environment required for dignified menstruation and recommendations for a menstrual-friendly environment.
"We have a bottle of center fruit instead of a bucket. Sometimes even this falls inside the hole of the toilet"

### 3.10.1 Challenges during management of menstruation during school days

All of the schools had presence of the basic facilities of toilets, but had major problems in its maintenance. There were separate toilets for girls but not in adequate number, there were locks
in doors but with frequent problems of maintenance where each of the school students described that not all toilets had locks. Cleanliness was something not much considered by any of the schools as the girls complained that they could not go to toilets given its unsanitary condition. Similarly, the presence of adequate supply of drinking water and water inside toilets was quite frequently mentioned by the girls. Also, other amenities for management of hygiene were not in place. The girls of the only private school in the FGD shared that there they did not have a bucket to use.

The girls shared that medication was not provided to them in case of menstrual pains but would rather be asked to go home or use hot bags to ease the pain. Sanitary napkins were provided in all of the three public schools but not in the one private school. Out of those who said that they had the facility of sanitary napkins in their schools, they expressed irregularity in the presence of sanitary napkins in schools. The participation in school activities during periods was an individual experience. While those who said that they would suffer from menstrual pain, they shared they had problems standing and playing during menstruation while the ones with no stomach pain considered that doing all these activities felt like any other day.

### 3.10.2 Menstrual Health Friendly environment

All of the girls considered that the behavior of teachers towards them was not discriminatory and they usually had one teacher who was easy to talk to about menstruation. The nature of the teacher seemed more important than the subject they taught for creating a supportive environment for the girls. Although some girls mentioned that there are certain boys who tease them during their periods but most considered boys to be supportive towards them.

### 3.10.3 Recommendations by girls and teachers

Most of the girls shared that they would require the availability and maintenance of basic facilities for managing their periods like dustbins for disposal of sanitary napkins, adequate number of toilets, soaps and regular supply of water inside toilets. Additionally, all of the school girls called for action towards presence of regular sanitary napkins from the school authorities especially to be used during emergencies in schools. They also shared that a resting room, a spare dress in case of staining and pain relief medicines should be made available to enhance their period experiences in schools.

Key Informant Interview with teachers
Two male and two female teachers were interviewed as part of the research. The school authority recommended a teacher who was responsible for management of sanitary napkins for key informant interview. All of the teachers agreed shared that their schools had basic facilities
to manage menstruation in schools. Contrary to the students they shared that there were enough number of toilets in schools and said that they were kept clean. In case maintenance of facilities, they seemed unaware of the lack of locks and cleanliness of the toilets. Lack of soaps was mentioned by all of the teachers attributing it to no budget, mismanagement of students and even lack of time to pay attention to these things. The management of sanitary napkins was unique to each of the schools. In public schools they either used the system of fund collection as stated by one of the teachers or were dependent on donations. There was no such facility in the private school. The female teachers were much aware of the problems faced by girls during menstruation while the male teachers said that the girls were more comfortable with female teachers. The shy nature of girls in participation especially in classes of menstrual health was expressed by all of the teachers as a concern. None of the teachers had heard about menstrual health friendly schools. Training and education on menstruation was one of the major recommendations provided by the teachers to enhance the period experiences of school going adolescent girls.

## Chapter IV: Discussion

The study reveals that the average age for the onset of the menarche was 12 years old and is supported by previous studies of Mukherjee, A., Lama, M., Khakurel, U. et al. (2020) and Sunuwar L, Saha CG, Anupa KC, Upadhyay Dhungel K. (2010) that reported similar finding. Strikingly, it was found that more than three fifth (69.3\%) of the girls never talk to boys about menstruation while only slightly less ( $61.7 \%$ ) boys talked to girls about it. It was reflected that only almost half of the participants felt comfortable at school during periods while pointing out these few steps for an enhanced period experience - organizing trainings in schools so that they can openly talk about menstruation, creating an environment free from period teasing, management of infrastructural facilities such as clean toilets, sanitary napkins, adequate water and dustbins, etc. The findings of the study tell that school WASH facilities were available but inadequate. It was observed that all the schools had separate toilet for girls with more than $80 \%$ of the doors of both public and private schools being lockable. While the National Sanitation and Hygiene Master Plan of Nepal (NHSMPP) of 2011 and Child Friendly School Framework (CPSF) emphasized separate toilets for girls, even when separate toilets were present they were found to be insufficient. The study found that all private schools had dustbins for throwing away used sanitary napkins while only $80 \%$ of the public schools had dustbins. Respondent girls belonging to schools with no dustbins were found to take their used napkins back home wrapped in a newspaper and plastic bag. All the private schools had the availability of water, while only about half of them had the provision of soap in toilets. While $93.3 \%$ of the public schools had the provision of water, only $61.9 \%$ of them had soaps for washing hands. Similar level of school WASH facilities was found in Zambia and Nicaragua.
$99 \%$ of the public schools had sanitary napkins available inside schools while this was $85.8 \%$ for private schools. Although the government of Nepal announced a free-pad distribution program in all secondary level schools in coordination with local governments in 2019, only more than half ( $60.60 \%$ ) of the public schools availed the napkins for free while around one third ( $30.40 \%$ ) of the private schools had them for free. Only a little more than half of the girls $(56 \%)$ never felt uncomfortable due to the behavior of male friends/students. This had resulted to $70 \%$ girls from private schools and about $46.7 \%$ from public schools being absent in schools. Contradicting to the finding, a study by Karki (2019) shows that $36.7 \%$ sometimes and $3.3 \%$ always missed the schools during menstruation. Similarly, the study performed by Oster \& Thornton (2011) contradicts with this finding which claims that menstruation has a very small impact on school attendance. More than half of the students (54.2\%) from private school were
found to have participated in training related to menstruation while it was $23.8 \%$ for public school. Similarly, more than one fifth of the boys ( $21.5 \%$ ) had not heard about menstruation, their sources of information being books, friends and family. Majority of them ( $88.8 \%$ ) had not seen a girl in the school carrying sanitary napkin in her hands. More than half of them (52.8\%) had seen a girl classmate saying that she is suffering from pain in the uterus. $86.4 \%$ of the boys had not ever been requested to buy a sanitary napkin. While most of the believed that menstruation was a natural process, $6 \%$ of them still believed that menstruation was a dirty thing. Only $15.4 \%$ strongly disagreed that they don't like talking about menstruation. $64.5 \%$ of them strongly agreed that menstruation was everybody's concern. Observational findings of present study suggest that $93.33 \%$ of the schools toilets were not disable friendly. From journey mapping, majority of the girls ( $90.6 \%$ ) were found to not have felt comfortable during leakage and staining in schools while none of them were found to be very uncomfortable in changing pads and disposing them. Meanwhile, only $31.3 \%$ of them were comfortable asking for pads to the school authority. The prominent reasons behind this were found to be shyness and the pads availed at schools not being the ones of their choice.

Qualitative findings reflect that cleanliness was something not much considered by any of the schools as the girls complained that they could not go to toilets given its unsanitary condition. Similarly, the presence of adequate supply of drinking water and water inside toilets was quite frequently mentioned by the girls. In the KII, all of the teachers claimed that their schools had basic facilities to manage menstruation in schools. Contrary to the students they shared that there were enough number of toilets in schools and said that they were kept clean. And on the matter of sufficiency and regular availability of soaps, the teachers revealed that budgetary constraints were the reason for the issue behind it. The recommendations suggested by students, that go in concordance with a UNICEF (2018) study, clearly explained that the availability and maintenance of basic facilities for managing their periods like dustbins for disposal of sanitary napkins, adequate number of toilets, soaps and regular supply of water inside toilets, sustainable management of sanitary napkins, a resting room, a spare dress in case of staining and pain relief medicines management were the good strategies to enhance their period experiences in school.

Interestingly, a significant association was found between perception of male /female teachers, male/female friends including junior/senior students and its influence in absenteeism, studies and extra-curricular activities in schools with P - value $<0.05$. For instance, four fifth of the
girls responding as often being uncomfortable due to their male teachers responded as their participation in extracurricular activities being affected.

This study is one of the scant to exclusively examine the menstrual health friendliness of schools in Kathmandu valley incorporating both the public and private schools' girl and boy students using qualitative and quantitative approaches - the result of which will develop strong evidence on how the period experiences of menstruating students in school can be enhanced, also drawing attention of the policy makers to draft policies in a way that they could involve all the integral components (MHM ) to achieve healthy lives and promote well-being for school going adolescents.

## Chapter V: Conclusion and Recommendations

### 5.1 Conclusion

Perception of male /female teachers, male/female friends including junior/senior students affects the participation of girls in studies, extracurricular activities and absenteeism in schools during menstruation. While only almost half of the participants felt comfortable at school during periods other challenges facing girls in schools include adequacy, maintenance and cleanliness of toilets and availability of sanitary napkins.

While explaining that the availability and maintenance of basic facilities for managing their periods like dustbins for disposal of sanitary napkins, adequate number of toilets, soaps and regular supply of water inside toilets, sustainable management of sanitary napkins, a resting room, a spare dress in case of staining and pain relief medicines management as the good strategies to enhance the girls' period experiences in school, at the final point this study noted eight major improvements in the study area; well maintenance of WASH facilities, management of pain medications and a separate resting room within the school, management of sanitary napkins using a sustainable model, age appropriate comprehensive sexuality education with equal participation of both males and females, sensitization of teachers both male and female on the issue of menstruation, ensure the sustainability of the MHM trainings conducted, a massive mobilization of mass media for challenging the stigmas, negative associations around menstruation and regular monitoring mechanism of local government.

The results of this study serve to better understand how friendly the schools in Kathmandu valley are in terms of menstruation developing strong evidence on how the period experiences of menstruating students in school can be enhanced, also drawing attention of the policy makers to draft policies in a way that they could involve all the integral components (MHM) to achieve healthy lives and promote well-being for school going adolescents.

### 5.2 Recommendations

1. Well maintained WASH facilities are required for the management of menstrual health in schools. Regular supply of water, soaps with adequate disposal facilities are essential for enhancing the menstrual experience of school going adolescent girls.
2. Besides WASH facilities management of pain medications and a separate resting room within the school is necessary to ensure that girls do not miss schools in the fear of menstrual pain,
3. Management of sanitary napkins using a sustainable model should be adopted to ensure that girls have regular supply of menstrual products in schools.
4. Age-appropriate comprehensive sexuality education with equal participation of both males and females are essential. Teachers should be provided with effective training to foster discussions across all students and create a supportive environment for the girls to discuss about their problems and challenges,
5. Sensitization of teachers both male and female on the issue of menstruation is essential. These will help school authorities understand the basic needs of menstruation
6. Besides schools, an equal responsibility of NGOs exists to conduct awareness on menstrual health and hygiene and ensure the sustainability of the trainings conducted
7. A massive mobilization of mass media for challenging the stigmas, negative associations around menstruation is essential to make menstruation a topic of normal conversation.
8. Local governments are equally accountable to ensuring that schools are abiding by the provisions they have mandated. A regular monitoring and follow-up mechanism is needed.

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## ANNEX I: FGD Guideline

Guideline for Focus Group Discussion with adolescent girls on making schools safer and healthier during menstruation

## Preparation for the discussion

## Participants

Number: 8-10 per group
Age group: 10-15, representing class 6-10
Gender: All female
Organizer:
Interviewer: 1 Nos.
Rapporteur: 1 Nos.

## Logistics:

Venue: Any safe space within the school premise [Eg: seminar hall, empty classroom, etc.]

Time: Preferably after the regular classes are over
Snacks: Arrange tea and cookies for the participants
Time to be spent for discussion: 1 hour -1.5 hours

## Materials required:

Notebook to take notes
Pen
FGD guideline
Loose sheets for each participant [Ask the student to bring their own pen for resource mobilization]

Voice Recorder

## Before the FGD

- Seek permission from the school to conduct the FGD
- Identify the venue and time for the discussion with the school authority
- Identify the potential participants with school authority. Try to make the group as inclusive as possible on the basis of age, class, ethnicity, etc.
- Inform the participants about the time and venue at least 2 days in advance. Convey well to them that they do not need any preparation for the discussion.


## Conducting the discussion

- In the beginning, warm up and build rapports with the participants. Help them get acclimatized to the setting.
- Introduce the facilitator and the note taker.
- Explain about the purpose of the discussion.
- If you plan to do the introduction of the participants, do not record it on the recorder.
- Get verbal consent from the participants to record the discussion
- If you are planning to take pictures, obtain permission from the participants.


## Discussion questions

1. Please share with us some of your prominent experiences during menstruation in school.
2. What infrastructures are available in your school to support safer and healthier menstruation?
a. Separate toilet for girls
b. Adequate number of toilets
c. Toilets with doors and locks
d. Cleanliness of the toilet
e. Adequate water
f. Dustbin to throw away used sanitary napkins
g. Soap and water to wash hands
h. Emergency medicine
i. Carrying the sanitary napkins (or other products) from classroom to toilet?
j. Sanitary napkins for distribution (free/paid)? How much do you pay/ for it?
3. If any of these do not exist, how have you been managing your menstruation? [Focus on lack of water, and disposal of sanitary napkins or other products - Carry them back to home? etc.]
4. What perception or behavior do you experience in schools, especially from these counterparts? Has there been any act of discrimination due to menstruation in the school?
a. Male teachers/staff
b. Female teachers/staff
c. Male friends
d. Female friends
e. Senior female students
f. Junior male students
5. Has the discriminatory behavior affected you in any way?
a. Absenteeism in school
b. Hampered academic performance
c. Hampered extracurricular participation
d. Mental stress
e. Physical stress
6. Has your school conducted any training sessions/workshops or other programs to enhance awareness about menstrual health?
7. What do you think should/can be done to make your school menstrual health friendly?

ANNEX II- Data collection tools and techniques
Survey to assess Menstruation Friendliness in School

| Data collection technique | Data collection Tool | Sample size | Sampling technique | Inclusion Criteria |
| :---: | :---: | :---: | :---: | :---: |
| Guided self administered survey - Boys | Questionnaire | 10 schools * 10 <br> students each $=200$ | Random sampling. <br> Sampling <br> frame: list of all boys of class 8,9,10 | - Class $8,9,10$ <br> - Boys <br> - Aged 13-18 |
| Guided self administered survey <br> - Girls | Questionnaire | $\begin{aligned} & 10 \text { schools * } 10 \\ & \text { students each }=200 \end{aligned}$ | Random sampling. Sampling frame: list of all boys of class $8,9,10$ | - Class $8,9,10$ <br> - Girls who have started menstruation <br> - Aged 13-18 |
| Key Informant Interview | Interview guideline | $\begin{array}{lrrr} 10 & \text { schools } & * & 1 \\ \text { teacher each } & & \end{array}$ | Judgmental sampling | 1 school head (Principal/ Coordinator/ Manager etc.) |

## Self-administered survey guideline for Girls

## Consent form:

We come from an organization named Visible Impact.
We want to know about menstrual health in your school.
You will not receive any benefits or lose anything by participating in this survey.
The answers you give will not be shared with anyone.
You can leave the survey at any time you don't want to continue.
Do you want to continue?

## I. Basic information

1. Have you started your menstruation?
a. Yes
b. No
1.1 If no, please discontinue the survey. Thanks.
2. How many years back did you start your menstruation? $\qquad$ years

## II. School infrastructures

Please let us know if these infrastructures are available in your schools?
3. Separate toilet for girls?
a. Yes
b. No
3.1 If no, how do you manage to change sanitary napkins during menstruation? Please explain.
4. Toilets with doors?
a. Yes
b. No, If no, go to question 5 .
4.1 If yes, are these doors lockable?
c. Yes
d. No
5. Dustbin to throw away used sanitary napkins?
a. Yes
b. No
5.1 If no, please explain how do you manage to dispose the used sanitary napkins?
$\qquad$
$\qquad$
6. Water to wash hands
a. Yes
b. No, If no go to question 9
6.1 If yes, Soap to wash hands
c. Yes
d. No
7. Medicine within the school in case of menstrual pain or excessive bleeding?
a. Yes
b. No
c. Don't know

If no, please explain how do you manage if there is excessive pain or bleeding when you are in class?
8. Are sanitary napkins available in school premises in case you forgot to get your own
a. Yes
b. No
c. Don't know
8.1 If yes, is it available for free or paid?
a. Free
b. Paid. Please specify the price to be paid for sanitary napkin per piece
$\qquad$
c. Don't know

If no, please explain how do you manage if you run out of sanitary pads at school?
9. How often do you talk with your boys classmates about issues relating to your menstruation?
a. Never
b. Rarely
c. Sometimes
d. Often
e. Frequently
II. Please agree or disagree to the following statements:

There is adequate number of toilers for girls in the school. Strongly Disagree Disagree Neutral Agree Strongly Agree
The toilets for girls are usually clean. Strongly Disagree Disagree Neutral
Agree Strongly Agree
There are adequate water facilities in the school. Strongly Disagree Disagree
Neutral
Agree Strongly Agree

If you are unsatisfied with any of these, please explain how do you manage to use toilet during menstruation?

## III. Perception of other people at school

10. Have any of the following people ever made you feel uncomfortable in regards to your menstrual health?
a. Male teachers/staff Very often Often Sometimes Rarely Never
b. Female teachers/staff Very often Often Sometimes Rarely Never
c. Male friends/students Very often Often
Never
d. Female friends Very often Often Sometimes Rarely Never
e. Senior/ Junior students Very often Often Sometimes Rarely Never
11. How has the fact that someone made you uncomfortable about your period affected -
a. Absenteeism in school Very often Often Sometimes Rarely Never

| b. | Hampered academics Very often Often | Sometimes | Rarely |
| :--- | :--- | :--- | :--- | :--- |
|  | Never |  |  |
| c. | Hampered cocurricular participation Very often | Often | Sometimes |
|  | Rarely $\quad$ Never |  |  |

12. Have you participated in any training sessions/workshops or other programs to enhance awareness about menstrual health at your school? If yes, please describe
$\qquad$
$\qquad$
$\qquad$
13. How comfortable are you regarding your menstruation when you are at school?
a. Very uncomfortably
b. Uncomfortable
c. Neither comfortable nor uncomfortable
d. Comfortable
e. Very comfortable

What can be done to improve it?
$\qquad$
$\qquad$
$\qquad$

## IV. Socio Demographic Information

I. Please provide the following information about yourself:
14. Age: $\qquad$ years
15. School type
a. Public/ Community school
b. Private
c. Others, please specify $\qquad$
16. Ethnicity
a. Brahmin
b. Chhetri
c. Janajati
d. Dalit
17. Religion
a. Hindu
b. Muslim
c. Buddhist
d. Christian
e. Others, please specify
18. Do you have these things at home? (Tick all that apply)
a. Television
b. Mobile Phone
c. Computer/Laptop
d. Electric heater
19. Name of school
20. Type of school
a. Public
b. Private
c. Community
d. Others
21. Class

## Self-administered survey guideline for Boys

## Consent form:

We come from an organization named Visible Impact.
We want to know about menstrual health in your school.
You will not receive any benefits or lose anything by participating in this survey.
The answers you give will not be shared with anyone.
You can leave the survey at any time you don't want to continue.
Do you want to continue?

## I. Basic Information

1. Have you heard about menstruation?
a. Yes
b. No
1.1 If yes, explain in few words what is it?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
1.2 If yes, who did you learn it from?
$\qquad$
$\qquad$
$\qquad$
2. How often do you talk with your girls classmates about issues relating to their menstruation?
a. Never
b. Rarely
c. Sometimes
d. Often
e. Frequently
3. What is the most likely response of your male friends in these circumstances:
a. See a girl in your school carrying sanitary napkin on her hands
b. See that a girl has left bloodstains on the school bench
c. A girls classmate says that she is suffering from pain in the uterus
d. Requests a male friend to buy her a sanitary napkin
4. Please agree or disagree to the following statements
a. Menstruation is a dirty thing. Strongly agree Agree Neutral Disagree Strongly Disagree
b. I don't like talking about it at all. Strongly agree Agree Neutral Disagree Strongly Disagree
c. It is a natural process. Strongly agree Agree Neutral Disagree Strongly Disagree
d. I respect girls for menstruation. Strongly agree Agree Neutral Disagree Strongly Disagree
e. It is everybody's concern and we all should work to make it safer and healthier for all girls. Strongly agree Agree Neutral Disagree Strongly Disagree
5. How comfortable do you think the girls in the school are when it comes to menstruation?
a. Very uncomfortable
b. Uncomfortable
c. Neither comfortable nor uncomfortable
d. Comfortable
e. Very comfortable

## II. Socio Demographic Information

I. Please provide the following information about yourself:
6. Age: $\qquad$ years
7. School type
a. Public/ Community school
b. Private
c. Others, please specify $\qquad$
8. Ethnicity
a. Brahmin
b. Chhetri
c. Janajati
d. Dalit
9. Religion
a. Hindu
b. Muslim
c. Buddhist
d. Christian
e. Others, please specify
10. Do you have these things at home? (Tick all that apply)
a. Television
b. Mobile Phone
c. Computer/Laptop
d. Electric heater
11. Name of school
12. Type of school
a. Public
b. Private
c. Community
d. Others
13. Class

## ANNEX III- Guideline for Key Informant Interview

## Guidelines for Key informant interview with the school Authority

1. Which of the following facilities exist in the school premises? Tick all that apply

- Separate toilet for girls
- Adequate number of toilets
- Toilets with doors and locks
- Cleanliness of the toilet
- Adequate water
- Dustbin to throw away used sanitary napkins
- Soap and water to wash hands
- Emergency medicine
- Sanitary napkins (or other products) from classroom to toilet?
- Sanitary napkins for distribution (free/paid)? How much do you pay/for it?

2. Do children come up with any problems related to menstruation? If yes, what kind of problems do they come up with? How often to school children come up with problems related to their menstruation? For (Eg: heavy bleeding, excessive pain, absenteeism etc.)
3. What do you do when the girls come up with these problems?
4. Who do they often share their problems with or approach first? (Eg: EPH teacher / Female teachers/ Extracurricular teachers etc.) [Note if the teacher is a male or a female]
5. Do you think there is an environment for open discussion regarding menstrual problem in the school?
6. Has your school conducted any training sessions/workshops or other programs to enhance awareness about menstrual health?
7. Do you know/heard about menstruation friendly school? How can you make school menstrual health friendly?
