Girls' education is compromised when they have to manage their menstruation in a disempowering school environment.

Girls face barriers to successful school completion with the onset of menarche. An unsupportive school environment including inadequate gender segregated water, sanitation and hygiene (WASH) facilities and untrained or unsupportive staff, lack of appropriate sanitary protection materials and lack of information on puberty and menstrual management contribute to social exclusion, reduced participation and concentration in the classroom, and decreased school attendance. ²²

Lack of water and sanitation at school poses challenges to menstrual hygiene.

- "The toilets have no good doors, and anyone can see when you are changing. (IDI 25, girl aged 12)".8
- "...the boys are using it so we can't use the toilet. The toilet in school is always busy because it's only one. (IDI, Girl)". 10
 - Only 13 out of 285 rural schools in Sierra Leone have toilets that meet the national standards.
 - o In rural areas of Bolivia, pit latrines(63.7%) and open defecation (10.8%) are the most common forms of sanitation in schools.¹⁵
 - \circ In the Philippines a study found that there are an average of 330 girls for every partially functional school latrine. ¹⁰
 - The construction of gender-separated latrines was found to substantially increase national school enrolment in India among pubescent age girls.
- "When girls change their sanitary pads they just throw it in the bowl" (Manila School, FGD, Boy student)
 - Girls report disposing of used menstrual materials by throwing them into rivers, latrines, dustbins⁶; carrying materials home^{6, 13},; leaving materials outside on roadsides or in farms⁵; burying materials¹³; or flushing materials down the toilet^{8, 23}.
 - o In Masbate, Philippines, only one school out of nine had trash bins located within the girls' latrines. 10
 - When used menstrual cloth or sanitary pads are deposited in latrines or toilets, they can damage the sanitation systems.

Lack of appropriate sanitary protection materials affects girls' participation and wellbeing at school

- "It is sometimes difficult to get even pieces of cloth and they are old and dirty. Even our mothers do not always have enough of them (girls' FGD in Burkina Faso)". 12
- "I didn't know what was happening [at menarche] or what to do to manage menstruation. I used cotton wool, pages from an exercise book, leaves from trees. I suffered much embarrassment at school because I leaked and stained my uniform." (woman, FGD in Tanzania)¹¹
 - Girls report resorting to unhygienic materials to manage their menses that may lead to infection, including old clothing ^{13,14}, a shoe cloth⁶, towels¹³, tissue paper pads⁵, pads or cloth. ^{6,13}

Inadequate information makes girls unprepared to manage menses.

- "I got my period early one morning. I felt bad. I was scared to go to school and I hadn't told anyone because I was in the dormitory and I didn't have my mom or anything. I realized I had to figure it out myself" (girl, IDI, Independencia). 13
 - Many girls are entirely unaware of menstruation prior to their first menstruation.^{6,14,17}
 - Many of those that learn about menstruation are first taught by mass media ⁹, their friends ^{6,10,13,14}, close relatives ^{13,14}, or their mothers ^{5,18}, rather than a formal education setting.
 - In a Nigerian study, only 8.8% of girls had learned about menstruation through either school teachers or health workers.
 - Girls across cultures and countries have described menarche as a negative experience, expressing feelings of fear, confusion, shame, and worry. 5,6,10,13,17,19
 - In Pakistan, 58.3% of 1275 girls experienced fear, while 42.2% experienced worry at first menarche. 4
- "I want to know how to take care of myself and the things you should do... and not do during menstruation.(IDI 2, School 1)".⁶
 - While cloth is considered a viable cheap alternative to pads in many countries, girls often avoid drying them in the sunlight, which may lead to infection. ^{6,13}
 - Girls receive incorrect information or no information about menstruation.^{2,6,10,13} This leads to negative feelings about menses, as well as restrictive practices such as reduced bathing ^{4,13,18}, reduced physical activity, social exclusion^{6,10,13} and general stigmatization of a natural and normal bodily function.

When girls experience menstruation but lack the facilities, information, or materials to manage it in school, they are distracted, unable to concentrate, stop participating in class, self-exclude or become socially excluded by peers, and may skip school altogether.

- "I still remember my class mate, a brilliant girl who dropped out of school because of menstruation. She was so ashamed of her blood stains that she never came back to school (male prefect, Niger)". 12
 - $\bigcirc \quad \textit{Oftentimes girls miss school as a result of the varying implications of menses on their school life.} ^{1,6,7,10,13,14,17,18,19,23}$
- "I still go to school when I have my period, but I avoid going to the chalkboard when I'm in class."(girl, IDI, Tacopaya).
- "They feel as if they have been isolated... and they become lonely. Some can easily be depressed and their school performance affected badly. (FGD 10, girls aged 12–14 out of school)".8

Girls' education is compromised when they have to manage their menstruation in a disempowering school environment.

 Girls interviewed in Philippines, Bolivia and Sierra Leone state that they would avoid their friends, for fear of teasing or having an odour.^{6,10,13}

To address MHM challenges that inhibit girls' educational experience, we need:

- Schools with gender separated facilities that provide privacy, soap and water, and space for changing materials
 use for absorbing menstrual blood, for washing hands, private parts, materials and clothes, including safe and
 convenient disposal facilities for used menstrual materials (from collection point to final disposal). ^{24, 25}
- Boys and girls receive comprehensive and age appropriate puberty education, that ensures understanding of the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear.
- Teachers are trained on how to ensure a supportive school and learning environment ensuring that girls feel confident to participate in their educational learning without fear, shame or risks to their dignity.

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