

## Menstruation: A Hurdle to Academic Achievement among Adolescent Girls

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As an adolescent girl, I get menstruation every month with the varied experiences of physical and emotion changes in my mind and body during this period. At the beginning of age of 14, I got my first menarche and now I can feel and know the effects and impact of menstruation on every other adolescent's life. When I was just 14 years old, due to menstruation, I also dealt with mental health issues, physical issues, social issues and cultural norms, other beliefs and myths about it, and even feeling shy to share about it. Early puberty experiences with menstruation not only introduced me about its effects on a woman's life, but also to multiple aspect either directly or indirectly associated to menstruation. One of the important aspects is the significant loss of health and education, of which I was also a sufferer.

Women's health issues are generally under-represented in elementary and translational research study, but the concerns of reproductive health in particular has been trammled by a lack of enhanced understanding of basic uterine and menstrual anatomy. As most of the females menstruate between menarche and menopause, hence menstrual health is an integral as well as fundamental part of overall health. Normally, menstruation is an array of the events involving the roles of pituitary, hypothalamus, ovary and endometrium which occurs in a proper sequence [1]. Menstruation is the monthly shedding of the uterine lining which is also termed as menses, period, menstrual cycle or menstrual period [2]. Normal menstrual cycle, which occurs each and every month at regular intervals in a coordinated serial way engages the performance of various hormone and glands [3]. Normal menstrual cycles last  $28 \pm 7$  days, a fluctuation of  $\pm 2$  days is accepted in the same female, as a normal and usual pattern, which is stated as a regular menstrual cycle [4].

Adolescence is a developmental phase of human life where multiple physical, biological, mental, emotional, and physiological changes occur between childhood and adulthood with ages 10-19 years [5]. About 6.0 million or 24% of the Nepalese population are adolescents in Nepal [6]. Due to physical, biological, and mental changes in the adolescent phase, they suffer from

different problems and risks. The risks and problems from which both boys and girls suffer during adolescence are; problems related to mental health like depression, anxiety, substance use disorders, attachment towards sexual abuse, suicidal risks, etc. [7]. But, girls suffer and experience more challenges as compared to boys [8]. The major problem suffered by girls during adolescent age is menstruation and problems related to it like; amenorrhea, dysmenorrhea, and menorrhagia [9]. Menstruation is a naturally occurring biological process indicating the health status of every female. Moreover, adolescent girls suffer a lot during menstruation by some common problems like; dysmenorrhea, pre-menstrual syndrome, mood swings, etc. Pre-menstrual syndrome is a syndrome that occurs about one week before menstruation and is characterized by anxiety, mood swings, symptoms like; backache, thigh and muscle pain, and breast tenderness [10]. Dysmenorrhea is defined as the pain and stomach cramps that occur during menstruation. It is the most common problem or menstrual disorder that occurs in recently turned adolescent girls [11].

Due to these menstrual problems in adolescent girls, a great impact on their academic performance is seen. It is one of the major causes of their short-term absence from school [12]. Some of the major problems that impact on academic performances of adolescent girls in their school are lack of proper provision of privacy for girls in school, fear of getting bullied by boys in the classroom, fear of getting stains on the dress while answering questions in school, taboos about what to do and what not to do during their menses [13]. With all of the above challenges and problems they not only suffer for one or two days, it is one of those problems in adolescent girls from which they suffer every month.

Moreover, menstruation occurs in every woman in each 21-45 days' time interval and it remains for 3-7 days in a healthy female [14]. It is imperative that adolescent girls suffer from these painful problems and challenges every month which creates a deteriorating impact on their academic performance. Several research works have been done till now to investigate the impact of menstruation on academic performance among

adolescent girls. Among all the research done till now, few studies have investigated the impact of anxiety and terror related to the menstrual cycle on a woman's daily routine [12]. A study conducted among 600 students in Delhi investigated that 245 girls were compelled to miss their classes because of their menstruation. In this study, about 65% of adolescents reported that their academic performance was disturbed because of abdominal and back pain, fear of getting bullied, worry of getting stains on their uniform, etc. during their menstruation [15]. Similarly, another research work conducted in Kenya by the Ministry of Education (MOE) in 2017 analyzed that many girls in Kenya skip their classes during their menstruation which disturbs their regular classes and hence, creates a great impact on their academic performance [16]. In a study conducted by Esra Bilir conducted on Turkish 352 adolescent girls in Turkey found dysmenorrhea and pre-menstrual syndrome as the main hurdles for the academic performance among girls. Moreover, majority of the students suffer from the depression because of their lower academic performance during menstruation. Hence, menstruation affects the academic performance of adolescent girls [17]. The study conducted in the Palestine refugee camps reported that adolescent girls suffer from dysmenorrhea during menstruation and hence, it causes missing school and impacts the ability to concentrate, many girls also reported that they were unable to study for their tests, and complete their school assignments [18]. Another study done in Pune of India among adolescents of rural areas investigated that many girls remain absent during their menstruation because of menstrual disorders, abdominal pain, socioeconomic conditions, and lack of proper management knowledge about menstrual health. This study also concluded that many girls remain absent because of a lack of sanitation facilities [19].

In context of Nepal, many studies about menstruation and its association with academic performance has been carried out previously. Among them, one of the studies on menstruation among adolescent girls suffer physical, emotional and social changes and also demonstrated that there was an effect of the use of clothes as absorbent during menstruation on academic performance. Also, too many teenagers miss school during their periods because of the increasing likelihood of stains on the uniform due to the usage of absorbent clothing [20]. The study of Kalikot, Nepal revealed that menstrual hygiene practice was poor as well as many inappropriate myths on cultural and religious beliefs regarding menstruation highly affected the academic performance of adolescent girls [21, 22]. It has also been noted that Chhaupadi pratha of the far west is still the predominant reason for mental and physical insecurity in menstruating adolescents [23]. Regarding the menstrual context in Nepal, the government of Nepal has

undertaken numerous national level initiatives to address the issues of absenteeism which reduces the academic performance of adolescent girls during their periods. The Nepalese government built numerous latrines for girls in schools to address the issue of managing restrooms in a way that is favorable to women's hygiene and allow them to change their pads during their periods [20, 21]. Nepal government allocated that more than 1.3 million adolescent girls will receive free sanitary pads from their community schools and they are getting the sanitary pads through the Nepal government in their governmental and community schools [24].

In Nepal, several programs are held at the national level and provincial level many of which are funded by multiple international organizations. Programs like WASH (Water, Sanitation and Hygiene; supported by UNICEF) focus on the cleanliness of schools and creating a female- friendly latrines to prevent absenteeism but have not been as successful as intended [25]. The government of Nepal (GoN) has started distribution of free sanitary pads to all female students in community schools for safer and cleaner menstruation health since 2020 which is highly appreciated [26]. However, the distribution of sanitary pads at private schools is still unknown. The launch of weekly Iron Folic Acid Supplementation (WIFAS) in schools in Nepal by GoN with the support of UNICEF has also helped female students from Iron deficiency anemia, improving their nutritional status [27]. Further strengthening of these programs with active and persistent mitigation of weaknesses and threats will secure the academic futures of female students. Nepal still needs the reduction of stigmas surrounding menstruation with the concept of mass awareness even though inclusion of concepts regarding menstruation explored across the Nepali curriculum [26]. However, menstruation has great impact on the academic achievement among adolescent girls. They remain absent for 4-5 days every month which hampers their academic performance, greatly affecting their mental peace and potential to achieve greatness. However, to reduce absenteeism, governments at local and national levels are dedicated to their work, though many weaknesses persist.

Despite all these efforts which explore the social and environmental aspects of menstruation, the biological aspect of menstruation can't be solved by the government and the programs run by them. The pain due to dysmenorrhea, back pain, abdominal pain, etc. suffered by girls for 4-5 days are the main problems and cause for their school absenteeism. Further research on the biological aspects can assist in mitigation of these problems. Provision of proper diet, provision for medication, and use of heat pads for cramp pains might assist in the mitigation of the biological aspect of

menstrual problems. Besides the biological problems, the government and modern society are doing their best to solve this problem of hampered academic performance due to menstruation in female students in Nepal which will always be appreciated. Understanding the biological clock, menstruation which is a

metaphorical timepiece that ticks steadily within the female reproductive system, and managing it from early age with healthy mind set among the adolescent girls can be foundation to grasping the academic achievements in coming future.

## ADDITIONAL INFORMATION AND DECLARATIONS

### Acknowledgment:

I am thankful to Mr. Kshitiz Shrestha, MBBS scholar at Janaki Medical College, Nepal for all his guidance and support throughout the manuscript preparation. I also appreciate the efforts of Dr. Satyam Prakash, Associate Professor, Department of Biochemistry, Janaki Medical College, Nepal for his constructive criticism and comments which strengthen the quality of article.

**Competing Interests:** The author declares no competing interests.

**Funding:** Self.

**Author Contributions:** Author (AS) herself conceived the study, reviewed different scientific literatures from various online sources, performed theme analysis, drafted, and revised all the versions of the manuscript with her intellectual content prior to publication.

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**Citation:**

Singh A. Menstruation: A Hurdle to Academic Achievement among Adolescent Girls. *MedS. J. Med. Sci.*2024;4(7):82-85.

Received: 22 May 2024 | Revised: 15 June 2024 | Accepted: 23 June 2024



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