

The impact of menstruation on the well-being of female students in a private higher education institution in South Africa- A qualitative study

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ABSTRACT

Introduction

Menstrual health needs to be recognized as a health issue, and not only as a hygiene problem. It affects the health and wellbeing of women, especially young women in higher education institutions. It leads to absenteeism and further adds to the existing high stress that students already have. Therefore, this study sought to explore the impacts of menstrual health/ menstruation on the well-being and academic performance of students in a private higher education institution in South Africa.

Methods

A case study was conducted using a qualitative approach. A total of 10 female students from a private higher education institution, a private higher Institution in South Africa were interviewed using the in-depth semi structured interview method. The participants' age ranged from 20 to 24 years old and the average age of menarche was 13 years old. Thematic analysis was used to analyse that data collected,

Results

Six themes were generated and these included, i) Negative menstrual experiences, ii) Perception on physical appearance, iii) Impact on mental wellbeing, iv) Impact of academic performance and v) Coping mechanisms and vi) Recommendations proposed by the participants.

Conclusion

The study showed that menstruation could affect mental, physical and social wellbeing of higher education institution of students. As the focus was on female students, a supportive environment is required to educate and support those using effective strategies to benefit their academic performance. It is also important to understand the coping mechanism adopted by female students towards their menstrual health. This will help with the decision making by the policy makers.

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INTRODUCTION

Menstruation is a natural process which occurs between menarche (beginning of menstruation) and menopause (end of menstruation).¹ Menarche is the first menstruation while menopause is when menstruation ceases. Menstruation is the cyclic discharge of blood from the uterine corpus during each cycle of 21–31 days, average 28 days.² The discharge of blood occurs for an average of 5 to 7 days.² The signs and symptoms of menstruation vary from person to person which may be fatigue, anxiety, cramps, irritability, bloating, acne, headaches and mood changes.³ According to the WHO, a healthy menstruation is described as the access to menstrual products, education about menstruation, water, sanitation, health care waste management and environment cleaning services (WASH).⁴ There are several requirements to ensure a healthy menstruation, these include, education about the menstrual cycle, equitable access to menstrual materials and services to ensure hygiene, privacy, treatment, as well as, the freedom to participate in all aspects of life throughout their menstrual cycle.⁵ This enables the achievement of the Sustainable Development Goals (SDGs) that have been set by the United Nations (UN).⁶ These include the SDG 3, which is to achieve good health and well-being, SDG 5, focuses on empowerment of all women and girls, and SDG 6 to achieve water and sanitation for all. All these work together to provide girls and women who menstruate with an enabling environment to live a productive life.^{4, 6}

More than 300 million women worldwide menstruate each day.⁷ There are millions of adolescents and women who struggle to achieve the SDGs 3, 5 and 6 despite the attention that menstrual health receives globally and progressively being recognized as a crucial health issue to be addressed.⁵ In low- and middle- income countries (LMIC), the menstrual experiences impacting the health and wellbeing of females is often neglected.⁷ Menstrual health has been linked to negative behaviours and mood changes among females

menstruating such as low mood, suicide attempts and psychiatric admissions.⁸ Among the adolescents and women who are students, menstruation related problems such as dysmenorrhea, affect class concentration, participation, socializing with friends, absenteeism, sports participation and overall academic performance.⁹⁻¹⁰ This highlights the importance of addressing issues in menstrual health among female students, especially in LMICs such as South Africa. Their experiences which were characterised as distressing and shameful have been shown to have negative impact on their education and psychological wellbeing.¹¹ Menstruation-related symptoms cause a loss of productivity, low quality of life such as poor general health and physical, mental, and social functioning.¹² Thus, this study explore the impacts of menstrual health/ menstruation on the well-being and academic performance of female students in a private higher education institution in South Africa.

Methods

Research design

The study utilized a qualitative approach and case study design. A case study design was deemed as an appropriate research design to explore social phenomenon, and to gain thick, contextual and an in-depth description of real-world settings.^{13, 14} It enhances the recollection of real-life situations, providing an explanation of a phenomenon.¹³

Sampling and data collection.

Purposive and snowball sampling methods were used to select the study participants. Once first female student was interviewed, she recommended another female student and then the second student recommended another student until 10 female students were interviewed. However, data saturation was reached on the 9th participant. Only female students from the IEMSA were eligible to be participants. Face-to-face interviews and semi-structured interviews were conducted after ethical approval by the Public Health ethics committee of the Independent Institute of Education (IEMSA).

Inclusion criterion: Participants must be female students of the IEMSA irrespective of

the field or year of study.

Exclusion criteria: Female students who were not students of the institution.

Procedure

The interviews were conducted in either an empty lecture room on the higher education institution campus, or in the postgraduate room in the library. The potential participants were approached on campus and informed of the purpose of the study and asked for their consent to participate. Once verbal consent was obtained, the participants were interviewed. They were then asked to sign the informed consent form after explaining the study and informing them that the interviews would be anonymous and confidential. They were also informed of their right to withdraw from the study. All the participants also consented to be voice recorded during the interviews.

Data Analysis

A thematic data analysis was conducted to generate themes. To identify appropriate information that was relevant to address the research question, the transcribed interviews were read and re-read for familiarization.¹⁵ This was essential to find pieces of information that were relevant to the study. Highlighters were used to colour the different codes and later similar codes were grouped together to generate themes. A total of 6 themes were generated from the codes.

Results

Below are the findings from current study. Table 1 shows the demographic characteristics of the study participants. The age of the participants ranged from 20 to 24 years old while the age at menarche, ranged from 10 to 14 years old.

Table 1: Demographic characteristics of the participants of the study

Participant	Age (Years)	Field of study and Year of study	Menarche
1	23	Bachelor of Public Health (Honours)	13-15 years but paused at 14 years
2	20	Bachelor of Law (not specified)	12 years
3	23	Bachelor of Accounting and Finance (Honours)	14 years
4	21	Bachelor of Accounting (Third year)	14 years
5	22	Bachelor of Accounting (Third year)	14 years
6	22	Bachelor of Accounting (Third year)	12-13 years
7	21	Bachelor of Public Health (Honours)	14 years
8	23	Bachelor of Computer Science (Third year)	10 years
9	20	Bachelor of Computer and Information Science (Second year)	11 years
10	24	Bachelor of Social Science (Humanities) in Communications and Media Studies (Honours).	12-13 years

Six themes were generated from the thematic data analysis, i) Negative menstrual experiences, ii) Perception on physical appearance, iii) Impact on mental wellbeing, iv) Impact of academic performance and v) Coping mechanisms and vi) Recommendations proposed by the study participants.

Negative Menstrual Experiences:

Most participants in this study, expressed that they had negative menstrual experience. They reported that during their menstrual cycle they experienced menstrual symptoms such as cramps, bloating, discomfort, soggy, difficulty in completing tasks, lack of productivity and lack of energy during their menstrual cycle. As highlighted by some of the participants:

"Bloating, I feel soggy, I feel like I don't want to do anything and I just want to relax in bed all day... I also feel like I struggle because of the menstrual cramps that I have." (Participant 1)

"Tired, lazy and bloated." (Participant 4)

Some of the participants shared that because of their menstrual experiences, their day-to-day activities were affected, such as:

"I would say it just takes me longer to do things but overall, I don't really experience symptoms" (Participant 2)

"I do not like going out on my period because I will be in pain, I will just be thinking about staining the surfaces or anything I'm sitting on or anything that I am next to. I'm not at ease and I'm not enjoying and I'm not living in the moment" (Participant 9)

However, one participant had a different response. The participant said that she did not have negative experience with menstruation.

"It doesn't really, no." (Participant 3)

Perception of physical experience

The participants linked their physical wellbeing to their physical appearance. According to them, they were very sensitive to their physical appearance because they felt bloated and also felt that they gained weight. There was also the paranoia of wearing white or tight clothing in case their clothes are stained. As highlighted by some of the participants:

"I feel very bloated and my perception of my physical appearance, is that I feel I look disgusting like never looked fatter, everything is just heightened. I feel like I have to be extra... I am extra hygienic in those times, showering twice a day. I feel like a bit more mostly during summer that I sweat more and I suppose I'm just nervous, not that I notice anything but I get nervous that I am going to smell bad." (Participant 3).

Additionally, an aspect that was highlighted was the influence of physical appearance on mental health:

"Yes, it does well firstly, with physical appearance I think I mentioned in one of your questions that one of my symptoms is being bloated, so often times I feel a little insecure in my physical appearance, because of the bloating, the clothes that would suit me before I feel like they don't suit me now. And I think it also ties into the mental health aspect, I kind of dwell on that situation and hammer around it before getting ready for class or to go out."

(Participant 1)

Another way in which their negative perception of their physical appearance is highlighted, is through the change of their hygiene practices during their menstrual cycle as 7 participants specifically mentioned that they have to, "shower twice a day", for various reasons such as worrying of the smell of blood and overall discomfort as well as how this perception and change of hygiene practices an effect on their academic performance. As they expressed:

"In terms of hygiene, it means I have to be extra. For example if I bath twice day, now I have to bath three times a day. I just have to increase everything because I will be scared. what if I smell what if the blood there this then pads- you need to change pads regularly and now it's also disturbing my classes because if I'm in class I have to be moving up and down, ten times so I checked if everything is okay, did I have a heavy flow or something. I need to change my pad, I need to wipe, I need to do this, so it is really an inconvenience, because you miss out a lot, because your main focus is on your period" (Participant 9).

Whereas some participants mentioned that their physical appearance was not negatively affected, their hygiene practices were altered during menstruation.

"It doesn't affect my physical appearance for me



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personally, yes, my hygiene practices are affected as in I obviously have to visit the bathroom more often than I usually would. I have to also bath more often than I usually would, so even if let's say I bath in the morning and I stayed at home usually I wouldn't take a shower at night if I stayed at home doing nothing all day but then if I'm on my period I will take another shower again at night" (Participant 2).

Impact on mental well-being

Most participants in this study reported that their menstruation has an impact on them emotionally and mentally. Anxiety, uneasiness and lack of motivation and mood changes were reported by the participants as feelings they had during menstruation.

"It makes me feel a little bit like I'm losing brain cells, because I'm working slower so it makes me feel stupid during the time" (Participant 4)

"a week before my period I feel grumpy, 1 week before my period, grumpy, very irritable, during I definitely feel less motivated to do anything boarding on the depressed side" (Participant 2)

"Usually when I'm on my period, I'm very short with people because of my impatience and irritability, so I don't like interacting with people. I would say also I'm more prone to lashing out so it causes a lot of problems there, I'm not very rational when on my period" (Participant 5)

Two participants did have different views, expressing that they did not experience much of an effect on their mental health or wellbeing, due to reasons of either not being aware if there was an effect or if they had become accustomed to their menstrual cycle.

"I wouldn't say it affects it that much, I mean I know they say your hormones on your period are very irregular but I don't think that. I probably do experience it, I just can't see the actual effects, maybe other people can but I don't think I can tell, like from being moody, I don't think I can tell" (Participant 6).

"Well, I'm used to it now so I don't think it has much of an effect because mentally I'm already ready to do that, during this time I'm going to have my period and for this long" (Participant 8).

Impact on academic performance

Of the ten participants interviewed, eight of them

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expressed that their academic performance was affected in such a way that they felt unmotivated, unproductive, and exhausted. They had difficulty focusing or completing their class assignments during their menstrual cycle. They also mentioned falling behind on work due to the menstrual symptoms. A response from one of the participants is shown below:

"I do become unproductive, it does become difficult to focus in class, I tend to have low energy by the time I get up or I just have little motivation to conquer the day or even start the day whether it be going to class or having to write test or just going to the library to complete an assignment, or even studying it just becomes difficult to even start" (Participant 1)

Participants 1, 3, 8 and 9, had contrary experience. According to them, their menstrual health did not directly influence their academic performance.

"Not directly, but definitely but I definitely fall behind on keeping up with homework during, because I feel tired and unmotivated but doesn't directly affect my marks" (Participant 3)

"I have two answers for that, in academic performance in terms of my ability to conduct my work or if need to do an ice task or assignment yes it does, I feel less motivated to want to complete my tasks, from school whether it would be an assignment, summative an ice task preparing for a presentation I feel more tired and I don't want to complete those however with my performance in terms of my final results it does not" (Participant 1).

Coping mechanisms

In this section the questions that were asked to the participants, were with the intent to understand the coping mechanisms that had been adopted towards their menstrual health. Most participants had expressed that they had adopted ways to manage the negative effects of their menstrual health on their physical, mental and social wellbeing, such as:

"Panado, lots! During my period, I try to make sure I exercise in the morning so I know that will make me feel better during the day" (Participant 3).

"I isolate myself and maybe taking deep breaths to not feel my anxiety" (Participant 5).

"I guess positive affirmations because it's kind of a life thing I can't really avoid so it's kind of a thing I have to deal with it so I just help myself" (Participant 2).

Regarding the effectiveness of their coping mechanisms, some of the participants felt that the



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coping mechanisms were effective whereas, some did not believe that they were.

"No, I don't, I don't know any other better way of dealing with it" (Participant 2).

"I think the sleeping is effective, because I'm tired and I don't feel like doing anything anyway, so I do think it even just helps the time go faster and it's just that this is ending very soon so that's how I feel about that" (Participant 4).

An element of culture was brought up by participant 9, who mentioned that of the culture she was brought up in, "Shona/Ndebele", one of the ways in which she was advised to cope with the effects of menstruation that her menstruating should be a secret.

"When you're on your period no one should know because they believe that it is a security threat of some sort, so you just have to be clean in other words you just have to be clean, people shouldn't see your blood, people shouldn't know that you are bleeding" (Participant 9).

Recommendations from the study participants

Seven of the participants believed that there were ways in which the school could enable students to mitigate the effects of menstruation, such as through the provision of sanitary product, the placement of awareness products to empower and educate female students on hygiene practices, increased accesses to therapists or counsellors. With the responses being:

"I think they should have talks about periods. Like seminars to tell woman that it is normal and they shouldn't be uncomfortable in it and it shouldn't make them feel like they cannot do anything because some people when they are on their period, they feel like they cannot do anything. People are different and react different to periods, so the school should hold some seminars to teach women how to take care of themselves. And then have services, yes of course there is the counsellor but maybe have someone that is specific to that field, so when you are on your period and you want to talk about something and bringing women together, just to explain to women how it is done and just to encourage people not feel uncomfortable" (Participant 9).

"I think there should just be an awareness programme within the institution that teaches us female hygiene" (Participant 10).

"Yes, instead of putting condoms they can put pads

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actually, well they could have both, maybe educate girls on feminine hygiene" (Participant 8).

Discussion

This study looked at the impact of menstruation on the well-being of students in a higher education institute in South Africa. Participants reported having different negative experiences during menstruation. Some of these experiences led to unfavourable perception towards their physical appearance and impacted on their mental well-being as well as academic performance. Findings were consistent with those from previous related studies.^{11,16,17} All the participants expressed various signs and symptoms before and during their menstrual cycle. These include discomfort, pain, moodiness, lack of energy leading to being unproductive, cramps, feeling bloated and bloated. Studies found that 3 out of 4 women were affected by premenstrual signs and symptoms, which were deemed to be common, such as mood swings, depression, acne breakouts fatigue, dysmenorrhea, bloating, anxiety, headaches and weight gain contributed by fluid retention, and these have been found to affect women physically and emotionally.³¹² Regarding mental well-being, mood changes, irritability and anxiety were experienced by the students in the study. Similarly, a positive correlation was found in a systematic review on premenstrual syndrome and depression, stress and anxiety, with some women reporting that due to their menstrual symptoms they were unable to complete tasks.² A cross-sectional study which aimed to identify the menstrual symptoms that women experience, as well as its impact on their everyday activities, found that the most prevalent symptoms that women experience which affect their day-to-day activities, during their menstrual cycle were dysmenorrhea, psychological complaint and fatigue.¹² The menstrual cycle is characterized by predictable and recurrent fluctuations in hormones—namely, the ovarian hormones estrogen and progesterone. During menstruation, estrogen and progesterone levels are relatively low.¹⁸ Low progesterone levels can cause mood symptoms and fatigue in women during menstruation.¹⁹ Studies showed that the greater an individual had a negative perception of menstruation the lower their confidence would be.^{21, 23} Academic performance is



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another factor that the participants said could be impacted by menstruation. In a study by Demeke et al, an association was observed between menstruation and academic performance. This is because menstruation affected their sleep, concentration, school attendance, study time and exam performance.²⁰ Additionally, other studies revealed that there was an increased rate of absenteeism and participation impacted by menstruation and some desire to sleep during lectures.²⁰ Meanwhile, the coping mechanisms mentioned by the participants in the current study include taking painkillers, sleeping, taking deep breaths and isolating themselves. This is similar to the findings of a study among female university students in Ethiopia where most of the students mentioned that their most effective way of coping during menstruation was taking a rest and sleeping.²³ According to Eshetu et al.²³ coping mechanisms for premenstrual symptoms that have been found to be effective are taking analgesics, resting, exercise, listening to music and hot showers. The study's participants recommended that institutions could mitigate the effects of menstruation. It was suggested that workshops and seminars should be held on campuses to empower and educate female students on hygiene practices. According to them, there should be increased access to therapists or counsellors to create a supportive environment for students that are struggling mentally, physically or socially during that period. Another factor that needs to be prioritized is increased access to free menstrual products, as the participants suggested that these could be made more available in the bathrooms on campus. According to Hennegan et al.²⁷ the social and physical environment plays a fundamental role in enabling positive experiences of menstruation, as through educating woman on hygiene practices and dismissing myths and taboos their knowledge can be

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enhanced. Therefore, suggesting WASH facilities for females to be able to change and dispose pads/tampons and making menstrual materials accessible.²⁷ In an LMIC like South Africa, universal access to menstrual hygiene products should be advocated for student, as it has been found that there are competing priorities such as food and fees which put females in a position of not having the means to buy menstrual products.²⁸

Strengths and Limitations

This study is not without its limitations. Although in-depth information was obtained, most students would elaborate more on the points they had made, once they were informed that the researcher had stopped recording. There was a potential recall bias for a few questions such as their menarche and the menstrual symptoms they experienced. Meanwhile, despite the complexity of this health issue, participants were open to being interviewed and providing intimate information to the researcher of their menstrual experiences. The participants were given a platform to voice out their views as well as suggest recommendations that the institution can take into consideration to mitigate the effects of menstrual health.

Conclusion

The study provides some evidence on the menstruation experience of female students in one of the private higher education institutions in South Africa. Institutions of higher learning need to put the impact of menstruation on female students and their unique needs into consideration when making their policies. This will help in reducing the potentially adverse impact of menstruation on women's educational experiences. Further studies that investigate menstrual health interventions which will address the negative impacts of menstruation on the well-being and academic performance need to be explored.

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