

RESEARCH ARTICLE

2023, vol. 10, issue 2, 300 - 306 https://doi.org/10.5281/zenodo.15254293

# THE IMPACT OF MENSTRUATION ON SCHOOL ATTENDANCE IN SOUTH AFRICA: A DEVELOPMENTAL ISSUE FOR WOMEN

THANDI S NGOMANE

Department of Research and Administration, University of Limpopo, South Africa, penziwanga@gmail.com, https://orcid.org/0000-0003-2968-8999

MOKOKO P SEBOLA

Department of Development Studies, University of South Africa, South Africa, mokoko.sebola@ipaginstitute.co.za, https://orcid.org/0000-0001-8003-3715

#### **Abstract**

This article analysis the impact of menstruation on girl's school attendance and how that impact on women's participation in developmental issues. It is estimated that most girl-children miss attending classes when they are on a menstruating cycle. Since menstruation only affect girls, boys do not have disrupted school attendance as compared to girls. Absence from school due to menstruation is argued to happen mostly at primary school than at high school level. The onset of menstruation can be very traumatic for young girls if unprepared. This can also be exacerbated by patriarchal views of menstruation as dirty and something that must be hidden from the public eye, including to men. In South Africa the debate around access to sanitary products by schoolgirls resulted in the removal of Value Added Tax (VAT) from sanitary towels. This article is qualitative in approach and uses desktop study method. The perception of menstruation is largely viewed from a patriarchal perspective, resulting in shame for girl child. The study concludes that missing school due to menstruation has a serious effect on girl's performance at school and in turn women's future participation in development since it has direct impact on women's literacy levels.

Keywords: Menstruation, Sanitary towels, Menarche, Cultural taboos

# 1 INTRODUCTION

The missing of classes by girl-children during menstruation cycle is a critical social concern. Generally, school going girls from poor background in South Africa have more disrupted school calendar days than boys. This social problem is mainly prevalent at primary school than high school. Menstruation cycle can be a very traumatic experience for unprepared young girls. Austrian, Kangwana, Muthengi & Solar-Hampejsek (2021:2) indicated that" qualitative studies conducted in Kenya, and other countries in sub-Saharan Africa have identified several challenges facing girls in managing their menstruation, including lack of access to menstrual products and lack of accurate information about menstruation". This can also be exacerbated by patriarchal views of menstruation as dirty and something that must be hidden from the public eye, meaning hidden from men according to feminists' activists.

This stereotyping affect girl's education as they have to skip school in cases where they can't control their menstruation (Gichuhi, 2022). Menstruation is the regular discharge of blood from the lining of the uterus through the vagina. The menstrual cycle occurs due to the rise and fall of hormones. This cycle results in the thickening of the lining of the uterus, and the growth of an egg which is required for pregnancy. The egg is released from an ovary around day fourteen in the cycle. If pregnancy does not occur, the lining is released and then menstruation occurs (Wikipedia, 2019). In addressing the content of this argument the article is structured to reflect the following aspects: a) A theoretical perspective, b) Girls and menarche, c) The South African scenario, d) Sustainable Development Goals And The Girl Child, e) Menstruation Within A Cultural Context, f) Religion and Menstruation, g) Menstruation and School attendance and, h) School Facilities And Menstruation.

## **2 THEORECTICAL PERSPECTIVE**

This article in grounded on the cultural feminism theory. The theory attempts to revalidate undervalued female attributes. It commends the differences between male and female genders. It is traceable to the mid 1970's and expressed sentiments against women oppression and its forms. It is based on the understanding of the difference between women and men on assumption of their biological differences and reproductive capacity. Furthermore, it commends the positive aspects of the female character or feminine personality. Significantly, the theory emphasizes the essential differences between men and women, based on biological differences in reproductive capacity. According to Bingham, Jackson, Gamblin, Mills-Jones, 2009; Alcoff (1988) "the liberation of women can only come through individual change where women recognises and create a women-centered culture, and the redefinition of feminism and masculinity".

On a positive note, cultural feminism creates a safe spaces for women such as rape crisis centers, shelters, facilities that cater for women's needs such as nursing rooms and gendered toilets. All these facilities assist by giving women locations dedicated solely to their needs. Cultural feminism strives to create and maintain a healthy environment-free of masculinist values and behaviors such as the stigmatisation of menstruation and the control of women's mobility during menstruation. Women's attributes such as menstruation are devalued even though it is an important process that gives birth to life. Menstruation is not only devalued but it is shrouded in mystery and seen as something diabolical despite it being a natural phenomenon such as defecating. Women are made to feel shame about their natural body functioning process, which force them to strive to hide the fact that they are menstruating. This cultural stereotyping and stigmatisation impact negatively on girl child schooling calendar. Especially those coming from poor families. The far-reaching effect are when it impacts on the ability of poor women to participate in developmental initiatives.

### **3 GIRLS AND MENARCHE**

The first menstrual cycle or bleeding of a female is called Menarche. This is the most significant stage of a woman's life, where she needs information, materials and resources to manage herself during this critical stage of life (Oladunni, Astril, Great, Victoria, Chigozirim & Favour, 2022). It starts at the onset of puberty and the onset differs from person to person based on genetics, nutrition and environmental factors. The onset of puberty is said to be averaging between ages 9 to 18 years (Jothy & Kalaiselvl, 2012; Tegegne & Sisay, 2014; Ramathuba, 2015, Oladunni, Astril, Great, Victoria, Chigozirim & Favour, 2022). Socially and medically, perspectives, the stage signallas puberty and possible fertility (Lu, 2001; Dambhare, Wagh & Dudhe, 2012; Boosey, Prestwich & Deave, 2014;). Whilst it is celebrated in some cultures, it is a taboo in some cultures as it is viewed negatively and can be a nightmare to others.

Menstruation is characterised by physical discomfort such as cramps, headaches, bloating, water retention, backache, nausea, diarrhea, breast tenderness, fatigue, irritability and anxiety amongst other things and feelings of shame, guilt, fear and embarrassment (Smith, 2009; Ngugi & Nyaura, 2014; Tegegne & Sisay, 2014; Khamdan, Aldallal, Almoosa, Alomani, Haider, Abbas, Haji, Aljamiri, Hamadeh, 2014; Boosey *et al*, 2014). The impact of menarche on a girl child depends on mental preparedness (Bhartiya, 2013) and girl children who have been prepared for menarche are said to have a positive attitude towards menstruation than those who haven't been prepared (Umeora & Egwuato, 2008; Smith, 2009; Tegegne & Sisay, 2014; Muralidharan, Patil & Patnaik, 2015). It is normally assumed that mothers and or other females within families prepare girl children for menarche, but in reality it is not so. Most girls experience this without being prepared hence the strong feelings of shame, guilt, fear and embarrassment (Jothy & Kalaiselvl, 2012; Dambhare et al, 2012; Bhartiya, 2013; Jewitt & Riley, 2014; Ngugi & Nyaura, 2014; Ramathuba, 2015). Even though the majority of women and girls discuss menstruation in private spaces, it however does not prepare them for the impact which is normally so profound that it leaves emotional and psychological scars that last a lifetime on the girl child. There are also cultural and religious stereotypes condemning woman biological nature to cultural taboos.

# **4 THE SOUTH AFRICAN SCENARIO**

In South Africa, the then President of the Republic Mr Jacob Zuma highlighted the need for services related to sanitary towels for women in his presidential speech in 2011. This sparked a lot of debate around access to sanitary products. At present three provinces which will be pilot sites for the distribution of free sanitary towels in no-fee schools have been identified as Mpumalanga, Eastern Cape and KwaZulu Natal. This pilot project was planned to be implemented in November 2019. Another stride made to create access to sanitary towels by women is that the South African government has since April 2019 abolished VAT on sanitary pads. Such follows announcement by the then Minister of Finance, Tito Mboweni in his Medium-Term Budget Policy Statement. This

is delayed, considering years of activism on same matter. It is envisaged that in future funds will be added to the provincial equitable share to enable all provinces to further this objective. Taking best practices that will be learned from the pilot sites, it is envisaged that in future all no-fee schools, hospitals and prisons will receive free sanitary towels for every woman. The South African government intends to not only issue free sanitary towels but to also ensure adequate disposal facilities, sufficient water and proper sanitation strategies to implement correct menstrual health and hygiene. To ensure that the policy is implemented, the sanitary towel campaign was allocated to the South African Department of Women to pioneer.

#### 5 SUSTAINABLE DEVELOPMENT GOALS AND THE GIRL CHILD

The Sustainable Development Goals (SDGs) aims to achieve a better and more sustainable future for everyone by 2030. SDG 4 talks to quality education which is the foundation to improving people's lives and sustainable development. The goal anticipates achievement of free primary and secondary schooling for boys and girls by 2030. One of the targets of the SDG is to "build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environment for all". Since menstruation affects school attendance by girl children through absenteeism, this thwarts all efforts by states to meet this Sustainable Development Goal (Jothy & Kalaiselvi, 2012; Tegegne & Sisay, 2014; Ngugu & Nyaura, 2014; Salim & Begum, 2016). It is argued that investing in girls' education has many returns for the girls and their families. Chepkoech, Mbirianjau & Gathara (2022:116) view girls' education as the "world highest yielding investment". It assists in development and women and girls to participate in the social and economic sphere of development. It is rightly argued that in developing countries, lack of knowledge on sanitary materials and hygiene facilities impact on both education and health outcomes of a girl child (Khamisa, Nanji, Tshuma & Kagura, 2022).

The situation in South Africa with regard to enrolment of boy and girl children shown in Table 1 below reveals an almost significant equal enrolment between gender groups at basic education levels. This significant development can be linked to the compulsory education system based on Section 3(1) of the South African Schools Act 84 of 1996. The Act compels children between the ages of seven (7) and fifteen (15) to attend school. The South African government criminalises parental failure to enroll children between the mentioned ages at basic education schools.

2004 2002 2003 2005 2006 2007 2008 2009 Male 96.0 96,7 97,4 97,6 97,4 97,6 97,8 98,3 **Female** 97,6 98,1 97,9 97,8 98,2 98,1 98,6 96.6 **Total** 96.3 97,2 97,7 97,8 97,6 97,9 97,9 98,5 GPI 1.01 1.01 1.01 1.00 1.00 1.01 1.00 1.00

Table 1: Gender parity in education access for 7- to 15-year-old children

Source: The Republic of South Africa: Department of Education (2011)

Table 1 above shows a steady increase in the number of children enrolling in primary school over the years from 2002 to 2009. It also reveals progress of equity in education access achieved between male and female children aged 7-15 years old. This also demonstrate gender gaps in terms of literacy rate gradually closing in South Africa. From the table above, it can be deduced that the number of girl children enrolling at primary school level is significantly equating that of their counterpart gender. Literature perused on subject, demonstrated that most girl children drop out of school as compared to boy children. One of the reasons mentioned is that girl children have a high probability of dropping out of school due to menstruation.

Sustainable Development Goal 5 talks to gender equality as a fundamental human right. The empowerment of women has more benefits since it helps to drive up economic growth and development. Providing women and girls with equal access to education, health care, decent work, and representation in political and economic decision-making processes will fuel sustainable economies and benefit societies and humanity at large (Ngomane, 2016). Notably, poverty cannot be ignored as a major source of absenteeism of girls at school during menstrual periods, emanating from lack of access to sanitary towels. The scourge of poverty has already taken a female form, and as such absenteeism by girls suggests a future increased of level of poverty amongst women. Such a posture risk women's future with lower literacy and inability to compete fully in the future economic landscape of their society.

## **6 MENSTRUATION WITHIN A CULTURAL CONTEXT**

Different cultures have got rules that must be adhered to by menstruating or "unclean" women at the time of menstruation cycle. In some cultures, there is no sexual intimacy when a woman is menstruating. She is culturally barred to go near boys or pass near them as she risks contaminating them. In some instances they are not allowed

to cook or go near the kitchen, are not allowed to eat certain foods, they are viewed as possessing bad spiritual omen and are thus seen as dangerous, they cannot fetch water from certain streams for fear of contaminating the water, they are not allowed to go to fields for fear of causing bad crops and thus poor yields (Guterman et al, 2007; Umeora & Egwuato, 2008; Lu, 2001). The fact that in some cultures women are forced to stay in menstrual huts away from everyone or at the edge of a village (Roberts, Goldenberg, Power & Pyszczynski, 2002; Guterman et al, 2007) is an indication of how strongly communities feel about menstruation. Even though there is a stigma with regard to menstruation women are blamed to also perpetuate discrimination, myths and cultural taboos since they only talk about menstruation in private spaces (Roberts et al, 2002; Ngugi & Nyaura, 2014; Bhartiya, 2013; Boosey et al, 2014; Salim & Begum, 2016). The fact that young women are taught by mothers and other female family members about menstruation and how to conduct themselves when they are menstruating is an indication of how misconceptions about menstruation are transmitted from one generation to the other. Women are also said to perpetuate gender stereotypes on menstruation or the myth around menstruation by not even saying the word menstruation but hide it by using euphemism such as "being on", "curse", "monthlies", "period". The word euphemism according to Cambridge Learner's Dictionary (2019) refers "to a mild or indirect word or expression substituted for one considered to be too harsh or blunt when referring to something unpleasant or embarrassing". In this case euphemism is used to avoid saying the word menstruation. The question is, unpleasant and embarrassing to who?.

The use of euphemisms and the control of women's mobility during menstruation is viewed by feminists as a patriarchal system meant to objectify and further subordinate women (Roberts *et al*, 2002; Umeora & Egwuato, 2008; Doherty, 2010; Ramathuba, 2015). Culturally menstruation is not to be spoken about, not to be heard or seen by men and this is an indication of the patriarchal nature where women's bodies and mobility are controlled. Instead of waiting for men to dismantle the stigma attached to women's bodies with regard to menstruation, it should be women who themselves dismantle cultural taboos and myths. The right knowledge needs to be passed from mother to daughter, grandmother to daughter and so on. Daughters should instead be taught to reclaim public spaces they have been denied and not pass on information where women are taught to shame their own bodies.

There are however many cultures in the world where menarche is celebrated and young girls are ushered into adulthood with celebrations (Ngugi & Nyaura, 2014). In most instances in the different cultures in South Africa, the whole family and even the whole village will celebrate with the young woman through a rite of passage ceremony. A rite of passage is a ceremony or ritual of the passage which occurs when an individual leaves one group to enter another and in this instance from childhood to adulthood. It involves a significant change of status in society (Wikipedia, 2019). The most interesting part however is once the celebrations are over, the shaming begins. The celebration then means nothing because what has been celebrated is now shamed. This causes confusion on a girl child. It is impossible for society to create strong confident women with healthy attitudes towards their bodies and their womanhood, if society teaches girl children and women that their body and womanhood bring them shame and disgrace.

## **7 RELIGION AND MENSTRUATION**

Most religions view women as dirty and unclean during menstruation. In most instances women have to be "purified" before they can be regarded as clean after menstruation. Women are regarded as "unclean" and "dirty" as menstrual blood is viewed as polluting and contaminating anything that women touch. In some churches a woman who is menstruating is not supposed to touch church clothing, go to church or touch biblical books (Guterman, Mehta & Gibbs, 2007; Umeora & Egwuato, 2008; Jewitt & Riley, 2014; Ngugi & Nyaura, 2014; Ramathuba, 2015). Most churches will discriminate against a menstruating woman by quoting biblical verses. The book of Leviticus: 15:19 is famous for being utilized to affirm the discrimination. It reads thus, "If a woman has an issue, and her issue in her flesh be blood, she shall be put apart seven days, and whosoever touches her shall be unclean until the even". Umeora & Ugwuato (2008) argue that the restrictions women face during menstruation are self-imposed because women continue perpetuating the restrictions on each other. One can only wonder what would happen if the women touched the scripts, clothing or attended church without them revealing that they are menstruating. With the use of tampons and other safe sanitary towels, it is easy to hide menstruation because chances of leakages are slim. It can then even be safely assumed that some women have done this before without being noticed.

## **8 MENSTRUATION AND SCHOOL ATTENDANCE**

Perused literature on menstruation indicate that women use different things when they menstruate ranging from, sanitary towels, tampons, cloths, rags, banana leaves, cow dung, newspapers or toilet paper. The type of

sanitation used depends on the economic background of the woman or girl child, based on economic ability of a family or whether they have access to such at places like schools or clinics (Tegegne & Sisay, 2014; Boosey et al, 2014; Grant *et al*, 2015; Muralidharan *et al*, 2015; Ramathuba, 2015). What girls use for menstruation has an impact on the quality of their health. There is a belief that underwear used for menstruation should not be exposed to the sun; but can be hidden in dark and sometimes damp places, to be used again in the next menstrual cycle.

Most literature sources reveals that most girls do not feel comfortable going to school when on menstruating cycle . If they attend, they are not attentive resulting in poor performance. This is because of pain or most importantly the fear of leakages. This is mostly due to the unreliable nature of the type of sanitary towel used during menstruation especially old pieces of clothing and rags (Dambhare *et al*, 2012; Jothy & Kalaiselvl, 2012; Tegegne & Sisay, 2014; Ngugi & Nyaura, 2014; Jewitt & Riley, 2014). This is because rags and old clothing do not offer the correct protection against leakages. The store-bought sanitary towels stick to underwear and will not shift when walking, they are wide enough to protect underwear from stains and tampons offer the best protection because they even allow women to swim or play sport since protection is internal. Staining or a leakage during menstruation is seen as deviating from the accepted norm of "hiding" menstrual blood from men. Leakages can be an embarrassment when one is teased by boys and girls. The stigma from for a leakage, can cause profound psychological impact on the girl child. Such may ultimately lead to poor school performance or lead to school dropout. Children are known to be merciless due to lack of tact which can lead to deep feelings of fear and embarrassment to a girl child who has not been prepared for either menarche or menstruation as most girls may not be able to handle the ridicule.

It is posited that most girls miss at least one day at school during each menstrual cycle (Dambhare *et al*, 2012; Bodat, Ghate, & Majumdar, 2013; Grant, Llyod, Mensch, 2013; Jewitt & Riley, 2014) presumably when their menstruation is at the heaviest, or when there is too much pain for them to bear. It can then be argued that most girls miss school due to fear of leakage, especially for those using cloths or rags as sanitary towels. This comes with feelings of shame or fear of being noticed that one is menstruating. It is argued that, if a particular class has a high number of girl-children who can menstruate at the same time, the impact will be that they will have problems of pain or lack of sanitary towels and chances of high class absenteeism rate. The fact that female teachers also struggle with menstruation and do absent themselves from school when menstruating is a double blow to the girl child because she misses classes due to her own menstruation and miss out on learning when female teachers menstruate and absent themselves from school (Ngugi & Nyaura, 2014).

Social restrictions on menstruation which also control girls' mobility has a direct impact on girls' school attendance (Ramathuba, 2015). This is exaggerated by parents who controls their girl children for fear of both sexual violence and negligence facing their children. According to Jewitt & Riley (2014) most girl children from disadvantaged background resort to transactional sex to money for exchange or affordability of sanitary towels. School attendance by girls is argued to improve well and only when schools provide free sanitary towels.

## 9 SCHOOL FACILITIES AND MENSTRUATION

Most girl children do not attend classes due to lack of engendered ablution facilities within schools. Girl children are said to lack private ablution blocks that have change or washrooms where they can wash, change and dispose sanitary towels when menstruating. The lack leads to girls opting to stay at home than go to school where they will not be in a position to change. Girls are said to experience fear for being found out or staining themselves and then be unable to clean-up (Bodat *et al*, 2013; Tegegne & Sisay, 2014; Jewitt & Riley, 2014; Boosey *et al*, 2014). In South Africa, there are schools without toilets and running water, as such learners have to relieve themselves in the bushes. It can then be assumed that girls would rather not go to school when menstruating because they cannot change and dispose their sanitary towels the open.

## 10 CONCLUSION AND RECOMMENDATIONS

Patriarchal attitudes play a significant role in how menstruation is viewed in African societies; and thus create feelings of shame and perpetuating the subordination of women to men. Women are also blamed for perpetuating the stigma attached to menstruation by teaching young girls to hide their menstruation from men. The first menstruation also known as menarche is said to be the first and important stage where a young girl can be taught about menstruation in a positive manner where the girl child can then develop a positive body image and self-esteem. This is however the time where society indoctrinates young girls and women to shame their bodies. The impact of menarche on girl children is said to be so profound that it leads to them missing classes every month when they menstruate and thus negatively impact on their education. The unavailability of sanitary towels in schools is said to be the contributing factor towards girl children's absenteeism from school. The results

of the study indicate that girls miss school due to lack of sanitary towels as most of them use old cloths and rags amongst other methods which do not offer the right protection from leakages. Most girls fear leakages as they expose them to ridicule by their peers, largely boys. Missing school due to menstruation has a serious effect on girl's performance at school and in turn women's participation in development since it has direct impact of women's literacy levels. Schools that offer free sanitary towels, gendered ablution facilities and water have less incidences of absenteeism by girls than those that do not have facilities to cater for girl children's needs. The South African government has made strides in the provision of sanitary towels as there are now three provinces which have been earmarked to pilot the provision of free sanitary towels in no-fee schools.

Based on the arguments generated from this article, the following recommendations are thus put forward:

- Development of a menstrual hygiene policy backed by an allocated budget. This will ensure that gendered facilities that will take care of women and girl children's menstrual hygiene are funded and established.
- Provision and increased access to sanitary towels by girl children in schools. This has the ability to keep the girl child at school. Educating women is an investment that will generate greater benefits to society by improving human capital investment, productivity and even average life expectancy.
- Provision of private rooms for girls to change, wash and dispose of sanitary towels coupled with soap, water and toilet paper. This will improve girl child high self-esteem.
- Menstrual hygiene awareness and training. This will enable both men and women to speak openly about menstruation. This will assist in addressing negative attitudes and practices that are discriminatory about menstruation. From this, women are likely to be encouraged to take control of their menstrual and reproductive health care.

#### **REFERENCES**

Alcoff, L. (1988). Cultural Feminism versus Post-Structuralism: The Identity Crisis in Feminist Theory. *Signs.* 13(3), 405 – 436

Austrian, K, Kangwana, B, Muthengi, E & Solar-Hampejsek, E. (2021). Effects of sanitary pad distribution and reproductive health education on upper primary school attendance and reproductive health knowledge and attitudes in Kenya: A cluster randomized controlled trial. Reproductive Health, 18 (2021),1-13

Bhartiya, A. (2013). Menstruation, religion and society. *International Journal of Social Science and Humanity*. 3(6), 523 - 527.

Bingham, J, Jackson, V, Gamblin, M, Mills-Jones, J. (2009). *Cultural Feminism in South Africa*. Jackson State University - USA Fulbright-Hays Group Project

Bodat, S, Ghate, M.M, Majumdar, J.R. (2013). School absenteeism during menstruation among rural adolescent girls in Pune. *National Journal of Community Medicine*. 4(2), 212-216.

Boosey, R, Prestwich, G, Deave, T. (2014). Menstrual hygiene management amongst school girls in the Rukungiri district of Uganda and the impact on their education: a cross-sectional study. *Pan African Medical Journal*. 19(253), 253 Cambridge Learner's Dictionary online. 2019. Retrieved fromhttps://dictionary.cambridge.org/dictionary/learner-english/euphemism

Chepkoech, D, Mbirianjau, LW & Gathara, PM. (2022). Exploring the trends in government provision of sanitary towels to secondary school girls in Nakuru county, Kenya. International Journal of Innovative Research & Development, 11(3),116-120. Doi:10.24940/ijird/2022/v11/13/MAR22035

Dambhare, D.G, Wagh, S.V, Dudhe, J.Y. (2012). Age at menarche and menstrual cycle pattern among school adolescent girls in central India. *Global Journal of Health Science*. 4(1), 105 - 111.

Docherty, S. (2010). Smear it on your face, rub it on your body. It's time to start a menstrual party!. Critical Theory and Social Justice. *Journal of Undergraduate Research* Occidental College, Spring (1), 2 - 25.

Gichuhi, L. (2022). Challenges and Gaps in sanitary towels provision in Kenya during COVID-19 pandemic. International Journal of Learning and Development, 12(3), 41-52

Khamisa, N, Nanji, N, Tshuma, N & Kagura, J. (2022). The relationship between menstrual hygiene management, practices, and school absenteeism among adolescent girls in Johannesburg, South Africa. South African Journal of Child health, 16(1), xx-xx. https://doi.org/10.7196/SAJCH.2022.v16i1.1803

Lese, K.M. (2016). Padded assumptions: Critical discourse analysis of patriarchal menstruation discourse ( Masters Theses). Paper 103. James Madison University.

Lu, Z-Y.J. (2001). The relationship between menstrual attitudes and menstrual symptoms among Taiwanese women. Blackwell Science Ltd. Journal of Advances Nursing. 33(6), 1 - 8.

Grant, M.J, Llyod, C.B, Mensch, B.S. (2013). Menstruation and school absenteeism: evidence from rural Malawi. Comparative Education Review. 57(2), 260 - 284.

Guterman, M, Mehta, P, Gibbs, M. (2007). Menstrual taboos among major religions. The Internet Journal of World Health & Societal Politics. 5(2), 1 - 7.

Jewitt, S, Ryley, H. (2014). It's a girl thing: Menstruation, school attendance, spatial mobility and wider gender inequalities in Kenya. *Geoforum.* Elsevier Ltd Publishers. 56, 137 – 147.

Jothy, K, Kalaiselvi, S. (2012). Is menstrual hygiene and management an issue for the rural adolescent girl?. *Elixir International Journal of Social Science*. 44, 7223 - 7228.

Khamdan, H.Y, Aldallal, K.M, Almoosa, E.M, Alomani, N.J, Haider, A.S.M, Abbas, Z.I, Haji, A.A.M, Aljamiri, S.Z, Hamadeh, R.R. (2014). The impact of menstrual periods on physical conditions, academic performance and habits of medical students. Journal of Women's Health Care, 3(5), 1 - 4.

Muralidharan, A, Patil, H, Patnaik, S. (2015). Unpacking the policy landscape for menstrual hygiene management: Implications for school WASH programmes in India. Waterlines, 34(1), 79 - 91.

Ngugi, M.N, Nyaura, J.E. (2014). Demystifying the menstruation process among the Kenyan girl-child. "A period of shame": A socio-cultural perspective. International Journal of Science and Research, 3(10), 1077 - 1083.

Oladunni, O, Asril, E, Great, O, Victoria, AA, Chigozirim, OO & Favour, AT. (2022). Factors influencing period among female adolescent students in public secondary schools in EDE North, Osun state. Journal of Gynecological Research and Obstetrics, 8(2), 014-021 Doi:https://dx.doi.org/10.17352/jgro.000109

Ramathuba, DU. (2015). Menstrual knowledge and practices of female adolescents in Vhembe district, Limpopo province. South Africa. Curationis, 38 (1), 1 - 6.

Roberts, T.A, Goldenberg, J.L, Power, C, Pyszczynski, T. (2002). "Feminine Protection": The effects of menstruation on attitudes towards women. *Psychology of Women Quartely.* 26, 131-139.

Salim, F, Begum, N. (2016). Hygienic practices during menstruation among adolescent school girls. Northern International Medical College Journal, 7(2), 139-142.

Smith, C. (2009). A period in custody: Menstruation and the imprisoned body. Internet Journal of Criminology. Griffith University. Australia.

Tegegne, T.K, Sisay, M.M. (2014). Menstrual hygiene management and school absenteeism among female adolescent students in Northern Ethiopia. BMC Public Health, 14, 1-4.

Umeora, O.U.J, Egwuatu, V.E. (2008). Menstruation in rural Igbo women of South East Nigeria: Attitudes, beliefs and practices. African Journal of Reproductive Health, 12(1), 109 -115.

Wikipedia. The Free Encyclopaedia. (2019). www.wikipedia.org/wiki/menstruation. Accessed 15 April 2019.

Wikipedia. The Free Encyclopaedia. (2019). www.wikipedia.org/wiki/Rite-of-passage. Accessed 16 April 2019.