# Effects of Menstrual Hygiene Management on girls' Academic Performance in selected secondary schools of Senanga District, Western Zambia

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*Abstract*: This study defined academic performance as the ability of school going girls to execute class work and other related curricular tasks timely, exhaustively and satisfactorily after a successful learning and teaching experience.

It sought to bring out the difficulties that were faced by girls in Menstrual Hygiene Management through the effects Menstrual Hygiene Management has on girls' participation in school and how supportive to Menstrual Hygiene Management the selected Secondary Schools were.

The study was a descriptive case study. It was qualitative in nature. Sample size was 48; 45 girls and 03 guidance and counseling teachers from 03 secondary schools. Simple random sampling was used with girls while extreme case sampling was used with Guidance and Counseling teachers. Data collection was done using questionnaires, interview guides and observation checklist.

From the point of view of the definition of academic performance used, the study concluded that MHM had negative effects on the academic performance of the girls. The difficulties brought about by inadequacies in facilities for MHM reduced attendance of the girls, impaired participation rendering the schools MHM unsupportive.

The study recommends that the schools access and adhere to the MHM National Guidelines to help reduce inequity arising from poor MHM and consequently improve the academic performance of the girls. Furthermore, the stakeholders are requested to explore the possibility of making the distribution of sanitary towels to school going girls a must. It further recommends that the making of reusable sanitary towels be taught to the learners as part of curricular and co-curricular engagement.

*Keywords:* Menstruation; Menstrual Hygiene Management; Academic Performance; component; class attendance; class participation

#### I. INTRODUCTION

Menstruation is, in most African traditions, embroiled in a lot of cultural expectations, taboos and secrecy (UNESCO, 2014: 10; WHO and BZgA, 2010). Unfortunately, academic research on the influence of puberty and menstruation on girls' school attendance and consequently on academic performance has been quite scarce (McMahon et al., 2011). Considering that the contemporary world demands that the children spend most of their childhood and adolescent life in school, the physiological changes that come with adolescence and the consequent psychological responses are likely to have a bearing on the education or school learning process. UNESCO acknowledges that in spite of there being a new cohort of learners reaching puberty every year, there is little systematic and comprehensive guidance on the vital subject of puberty; most importantly for the girls (UNESCO, 2014).

Menstruation is a salient issue because it may have more pronounced effects on the quality and enjoyment of education than do other aspects of puberty. The confidentiality so attached can cause discomfort on the part of the girls (UNESCO, 2014). Studies conducted in some countries especially developing ones' reveal that many of the girls' start menstruating without having an idea of what is happening to them and later on why (Jothy and Kalaiselvl, 2013; McMahon, et al, 2011). The problem is even amplified by the fact that parents find it rather difficult to speak sensitive issues and sexual issues with their children (Goldman, 2008).

The manner of management of the menstruation involves a lot; ranging from enduring the pain for some, to the need for sanitary facilities like toilets, water, change rooms and sanitary pads as well as good hygiene practices like washing hands with soap to maintaining the confidentiality attached to it. The non-availability of such facilities would entail a Menstrual Hygiene Management (MHM) unfriendly environment. The availability of these facilities may not be certain in most schools of the developing world. However, UNESCO (2014) asserts that without such things, the school environment is considered unhealthy, gender discriminatory and inadequate.

Although the importance of menstruation in limiting school attendance and attainment has been mentioned in some research and policy documents (World Bank 2005; Sommer, 2009) as well as receiving significant media attention (Kristof and WuDuwunn, 2009) very little rigorous evidence exists. The information that is available is largely anecdotal and fails to give a sense of depth of the matter of Menstrual Hygiene Management and how it affects the learning of the girl (Oster and Thornton, 2010).

There has been a response by a number of NGO's who have campaigned for the provision of sanitary facilities in an effort to improve girls' attendance in schools. There was a pledge by the Clinton Global Initiative to provide \$2.8 Million to aid businesses that provide inexpensive sanitary pads in Africa (Oster and Thornton, 2010). The successful implementation and access to the resources mentioned by the Clinton Global Initiative; among other things, can only be realized with empirical information on the situation on the ground.

Other authorities have indicated that Menstrual Hygiene Management is inevitably related with issues of gender inequality and closing the gender gap in education (Nanda, Lupele and Tharaldson, 2016).

The Zambia Education Curriculum Framework 2013 identifies reproductive Health as being essential in helping the learners appreciate the functions of their bodies and knowing how to handle their bodies (CDC, 2013). It goes on to state that learning institutions should therefore, "equip learners with knowledge and skills, values and positive attitudes about their reproductive health and sexuality ...." (CDC, 2013: 24). All such efforts require empirical studies to comprehend the situation on the ground and ultimately inform the undertakings to satisfy the realization of the aspirations as espoused in the Curriculum Framework.

In 2013 a Menstrual Hygiene Management (MHM) pilot study was conducted by the Ministry of General Education (MoGE) in Zambia with the support from UNICEF, SNV, Water Aid and other members of the MHM Thematic Working Groups to look at the management of menstrual hygiene among girls in primary schools and its effects on attendance of lessons in Zambia.

The study dealt with learners in primary school level and did not deal with the learners in secondary school. Furthermore is dealt with the aspect of attendance but left out the aspect of participation especially that a girl child would be in school but fail to participate fully in school work.

In 2014 another study was conducted to understand factors affecting the MHM practices among pupils in schools by the Center for Infectious Diseases Research Centre in Zambia (CIDRZ) with technical support from Emory University; USA and the University of Zambia's Department of Gender Studies.

Based on the studies conducted in Zambia, MoGE developed guidelines to help the provision of a supportive school environment for MHM. In 2014 the United Nations (UN) designated 28<sup>th</sup> May as World Menstrual Hygiene Day. Each year the day has been commemorated on themes that make calls for action on menstruation. The calls would yield results if more research was conducted on the thematic areas arising from MHM.

Thus this study looked at Menstrual Hygiene Management among Secondary School Girls in Selected Secondary Schools.

#### II. STATEMENT OF THE PROBLEM

There are a lot of myths and taboos that surround the biological phenomenon called menstruation and the female gender that experience it (UNESCO, 2014: 13). This results in negative attitudes being attached to menstruation. After the menarche, girls find it very difficult to manage menstruation in public places including schools.

In other circles it is said that every day, millions of menstruating girls and women in low – income countries are said to struggle to find clean water for washing, private places for changing and adequate blood absorbing materials (Crofts, 2012).

UNICEF, on the one hand, estimates that 1 in every 10 school–age African girls do not attend school during menstruation. Statistics from the World Bank show that girls in Africa record approximately 4 days every 4 weeks of absenteeism from school (World Bank, 2005). A study done in Ghana revealed that the performance in school improved when management of their menstruation was taken care of through puberty education and provision of sanitary pads (Montgomery et al, 2010).

On the other hand, a study in Nepal (Oster and Thornton, 2010) revealed that menstruation has no impact on attendance. Actually the Ghana study revealed that 95% of girls miss school due to menses while a study that was done in Malawi indicate that 7% of girls miss school due to menstruation (Cavill, et al., 2012). The implication established is that the extent to which menstrual management affect attendance differs drastically according to socio-cultural setting (Travers, 2015. p. 16).

Amidst such disparity in empirical consensus based on sociocultural setting (Travers, 2015. p. 16), the practical challenge of managing menstruation has been neglected and overlooked not only by the water sector but by the education and health sectors as well (House et al, 2013).

Thus this study endeavored to find out how Menstrual Hygiene Management affects the Academic Performance of the girls in selected secondary schools.

#### III. RESEARCH OBJECTIVES

The objectives of the study were:

- To find out the effects of Menstrual Hygiene Management on Girls' participation in school.
- To find out how supportive the schools are to Menstrual Hygiene Management.

#### IV. RESEARCH METHODOLOGY

A descriptive case study design within a qualitative research paradigm was used in this study. Descriptive statistics was made use of during analysis to accentuate the descriptive aspect of the case study. The target population for the study was all the girls in the secondary schools of Senanga district. The study also targeted all the School Guidance and Counseling teachers in the secondary schools of Senanga District. The sample size was 48. The distribution of the sample was 45 girls and 03 School Guidance and Counseling teachers.

Out of the 05 secondary schools in the district, the schools that were sampled were 03 representing 60% of the number of schools. It was from the 03 schools that 45 the girls and 03 Guidance and Counseling Teachers were drawn.

The 03 School Guidance and Counseling Teachers were sampled using Purposive sampling. The type of purposive sampling that was used was Extreme Case Sampling. This was so because the position(s) held by would be respondents are each occupied by one person making that person gain automatic participation in the study

The 03 secondary schools from the 05 secondary schools in the district which participated in the study were sampled using simple random sampling.

Similarly, the 45 girls from the 03 sampled secondary schools were sampled using simple random sampling. 03 girls were randomly sampled from each grade of each school; Grade 8 to 12. Therefore, 15 girls were sampled from each of the 03 schools.

Convenience Sampling was used to sample the girls for interview from among the girls randomly picked for questionnaire data collection. Therefore the technique of asking for a willing respondent worked for the task. The girls were asked on who was willing to be interviewed on the subject contained in the questionnaires they had responded to. 03 girls from each school participated in the interview; 01 from each grade; grade 8, grade 10 and grade 12.

The instruments used to collect data were questionnaires, structured interviews and observation checklist. The questionnaire were used to collect data from the learners; girls.

Structured interview schedules were used to collect information from both the School Guidance and Counseling teachers and some of the girls; the girls sampled through convenience sampling from among the total number of girls that answered the questionnaire.

A checklist/ observation protocol was used to collect information on the obtaining situation in the schools as regards presence of certain provisions as provided for in the MHM National Guidelines – Ministry of Education 2016. Participant observation gave the researcher chance to move around the school and check on the MHM facilities in the schools.

# Ethical Issues

Owing to the nature of the study and the taboos and secrecy that surrounds the subject matter of the study; in an African society, a female teacher, mostly the guidance teacher/ matron was engaged to administer the questionnaires and carry out the interviews. The researcher undertook to run the female teacher through the questionnaire and the interview schedule before leaving her to carry out the exercise. She was also made familiar with the way of taking notes as the she interviewed the girls.

The point of confidentiality was reiterated and that the respondents needed to express themselves without fear or reservation when answering the questionnaire or the interview

#### V. PRESENTATION AND DISCUSSION OF FINDINGS

## A. Difficulties faced by girls in MHM

The difficulties faced by the girls were put in thematic categories. The categories included the presence of facilities for MHM in the schools, attitudes on MHM issues and the clash of tradition and school environment.

## 1) Availability of facililites for MHM:

The facilities for MHM included availability of water for MHM, Privacy, places for Disposal of MHM waste, availability of absorbent materials and Psycho-social support. The matters arising from the theme on availability of facilities for MHM were based on the contents of the MHM Guidelines produced by the Ministry of General Educationchange the default, adjust the template as follows.

- a) Water: One of the schools had a girl child population more than 400 against 4 toilet pans. This meant that each toilet pan was used by 100. The situation was worsened by the erratic water supply and frequently blocked sewer system. The other school, the flushable toilets had no running water and water was put in a drum so that the toilet users would use them to flush the waste. Unfortunately, the amount of water in the drum was not always enough for the pupil population using the toilets per day
- b) Privacy: The privacy in the toilets was very much compromised. The other facilities included bathrooms and changing rooms. The toilets were such that they had no places for bathing or changing. All the 03 schools had the toilet rooms inside the ablution blocks without doors. The few toilet rooms inside the ablution that had doors were not lockable from the inside. The same toilets used by the secondary school girls were also used by the Primary and Early Childhood Education girls.

# 2) Disposal of MHM waste materials.

The other issues were to do with disposal places for waste materials and availability of absorbent materials like sanitary towels or pads. After using the pads or any other form of absorbent material, the materials used need to be disposed off. Given non availability of water in the toilets, the girls had a challenge of moving with the material in the bag so that they can dispose it off at home in mostly pit latrines. Actually none of the sampled schools had an incinerator or bins in the toilets. This cause the girls to prefer going back home to staying in school and pretend to be learning when in actual sense they are immersed in discomfort.

## 3) Attitudes on MHM.

As for gender attitudes on issues of MHM, the study found that MHM had negative connotations attached to it in the school communities. This was to the extent that the girls would hardly mention MHM as the reason they were seeking permission to go home but would rather fake another reason like headache, toothache or abdominal pains. In such situations, it was mentioned that the teachers especially the male teachers would rarely associate it to MHM but label the girls as being playful and not serious with school.

## 4) Clash of tradition and school demands.

There were taboos identified by the girls that were actually in conflict with the learning process/ activities and that most of the times those taboos were not known to the men folk that constituted the larger population of the teaching staff at the secondary schools. One serious taboo and belief is that when a girl *'has gone to the moon'* (menstruating), she is not supposed to sit next to a boy, shake hands with a boy or interact with boys in any way because the menstrual flow would be long and heavy and that the boys will contract a dangerous cough related disease called *sishako*. This is the culture, some of the pupils may have picked during their general socialization into puberty.

Some of the girls found it difficult to do away with the tradition completely. How much the male teachers and the boys in schools understand this issue about *Sishako* and appreciate it can be another subject for social research. It can nonetheless be an amplifying factor of the discomfort that the girls have when handling MHM especially with inadequate facilities in the schools.

#### B. MHM and girls daily attendance

The study found that MHM had a negative effect on lesson attendance of the girls in the schools. Of the 45 pupils in the study, 30; 67.6%, indicated that they were unable to remain in class when the menstruation started at school. The major reason why the girls' failed to be in school when the menstruation started was the non-availability of the MHM facilities in the school. This was given the situation that 37 of the 45 girls (82.2%) confirmed that they had their menstruation commencing whilst they were in school/class. The girls indicated that they had no option but to go home and manage the MHM from home

This study revealed that 68% of the girls indicated that they were not able to remain in class or school during menstruation. This was owing to the difficulties encountered in MHM. Much as some would not miss from school due to MHM, it is hereby established that the reason many of the girls missed from school was MHM. Furthermore, those that would not miss from school due to MHM could not remain in school from the

start to the end of academic activities due to MHM being handled in a circumstance of inadequate facilities.

This means that if the facilities were to be available the attendance of the girls in school during MHM would increase favorably. This finding is in tandem with the study done in Ghana (Montgomery et al., 2012) just like the study conducted in India (Neilson, 2010) as well as the study done in Ethiopia; South Gandar (Fehr, 2010). Increase of WASH facilities is critical.

## C. MHM and girls participation in class

The girls; in this study, considered to have been uncomfortable in class participation during menstruation are those that found it a little bit easy and those that did not find it easy at all. They added up to 71%. The explanation for being uncomfortable and inability to participate fully in class took note of schools having no changing rooms, no showers, no place for disposing MHM waste materials. Girls felt it was difficult to participate fully in the class activities when smelling menstrual blood and having a fear that the absorbent material worn may drop or would be putting the males within the school at risk of contracting *sishako*.

In some instances, the participation of the girls was said to be poor due to the fact for some pupils' menstruation was characterized by a lot of pain, sometimes very excruciating pain. Menstruation was said to be characterized by a form of pain or a combination of pains. Out of the 45 sampled girls, 29 girls representing 64% indicated that their menstruation was characterized by back pain. Of the same 45 girls, 37 girls representing 82% registered abdominal pains/ stomach cramps. Only 09 representing 20% mentioned dizziness as characterizing their menstruation. One form of pain or a combination of the pains affected the pupils. The pain being referred to which sometimes is graded as being excruciating is on its own a factor that can take a toll on the learner's concentration in class. The implication is that the girls have to make do with the pain whilst in class. The problem is exacerbated when the school is unable to provide painkillers to reduce the pain and enable the girls to participate in the learning activities.

# D. Surpportiveness of school to MHM

The schools were found to be lacking in most of the facilities that would support MHM. It was also found that there were situations when the financial resources in the school were said to be low and the school could not manage to give the sanitary towels to girls who commence their menstruation during school time. This was in line with the finding that pointed to the fact that 30 of the girls; 67%, confirmed to have witnessed a friend or friends who had their menstrual blood leak and soil their uniforms whilst within the school or classroom. Such an embarrassment resulted in such girls staying away from school for a good number of days to allow for the recovery from the ordeal.

The checklist that was used in this study to check on the availability of facilities needed for MHM was developed from the Menstrual Hygiene Management National Guidelines (GRZ, 2016). It ought to be pointed out the schools that were part of the study had not seen the MHM National Guideline before. From the checklist it was evident that most the WASH facilities were not available in the schools. In terms of availability of WASH facilities, the schools could well be graded as being Menstrual Hygiene Management (MHM) unfriendly.

The schools that took part in the study were found not to have had trained Guidance and Counseling Teachers. The teachers that were handling Guidance and Counseling issues were put in the positions for administrative convenience.

In terms of sanitary towels, the schools indicated that the sanitary towels were only provided for emergency purposes when a girl commenced menstruation whilst in school. From the findings 14 girls; 31%, indicated that some of the girls used homemade sanitary towels while 19; 42%, indicated that some of the girls used pieces of cloth. Looking at the aspect of homemade sanitary towels and the use of pieces of cloth, the number of girls that indicated that they personally made their absorbent materials was very small, 04 girls; 9%. The guidance and counseling teachers indicated that they had no idea on how the homemade sanitary towels were sewn. However, the MHM National Guideline (GRZ, 2016, p. 19) mentions it that "where disposable sanitary pads may be too expensive or unavailable, girls can be taught how to make their own re-usable cloth pads [Homemade sanitary towels] and learn methods of caring for them to ensure they are safe and hygienic to use." When the girls are taught, the attendance can improve reasonably, esteem and participation can improve academic performance can ultimately improve. and Unfortunately, in making the absorbent materials available for the girls, the schools that participated in the study were MHM unfriendly and MHM unsupportive.

#### VI. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this study, Academic performance is the ability of school going girls to execute class work and other related curricular tasks timely, exhaustively and satisfactorily after a successful learning and teaching experience. Class work may include but not exclusively the participation in general discussions, group/ pair works, group or class presentations, drama/role plays and class exercises; written or performed. Other related curricular activities include activities like projects, library and field research.

The study found that the girls faced a lot of difficulties in MHM in selected secondary schools of Senanga District. The difficulties that the girls faced in MHM were related to the availability of certain facilities in the schools. The facilities included water for MHM, bathrooms and changing rooms that would guarantee privacy. Sanitary towels were not always available even for emergency purposes in some schools. Others were disposal places for MHM waste materials.

The lack of the facilities resulted in the negative effect of MHM has on participation of the girls in school academic activities. The girls could not remain in school the whole day and attend to the school work properly. If and when they managed to stay in school the participation in lessons and other after classroom works was impaired. The secondary schools of Senanga district were found not to be supportive to MHM.

✤ This study concludes that the effect MHM on the academic performance of the girls in selected Secondary schools of Senanga District, Western Zambia is negative.

This study recommends that the schools in Senanga District work to improve the availability of facilities that will guarantee more privacy, hygiene and psycho social support for the girls as they handle MHM.

The Ministry of General Education should prioritize recruitment and appointment of trained personnel to handle the Guidance and Counseling in the secondary schools.

The Guidance and Counseling teachers to team up with the Home Economics teachers and other stakeholders to kick start and sustainably run a program of teaching the girls how to make homemade sanitary towels and how to hygienically use them.

All the schools should explore the MHM National Guideline (GRZ, 2016) and implement it sustainably.

#### REFERENCES

- [1] UNESCO Puberty Education and Menstrual Hygiene Management, UNESCO: Paris, 2014
- [2] WHO and BZgA. Standards for Sexuality Education Europe: a Framework for Policy makers, educational and health authorities and specialists, Cologne, 2010, <u>http://www.bzgawhocc.de/?uid=072bde22237db64297daf76b7cb998f0&id=Seite44</u> <u>86</u> (accessed 07.01.14).
- [3] K. Jothy and S. Kalaiselvl, "Is menstrual hygiene and management an issue for the rural adolescent school girls?" Elixir International Journal, Vol. 44, 2013., Pp. 7223 - 7228
- [4] S. McMahon, P. Caruso, B. Obure, A. Ogutu, E. Ochari and R. Rheingans, "The girl with her period is the one to hang her head: Reflections on menstrual management among schoolgirls in rural Kenya," BMC International Health and Human Rights, Vol. 11 (7), 2011, Pp. 1 – 10.
- [5] J. Goldman, "Responding to parental objections to school sexuality education: A Selection of 12 Objections," Sex Education, Vol. 8, 2008, Pp. 415 – 438
- [6] World Bank, Toolkit on Hygiene Sanitation & Water in Schools: Gender Roles and Impact, 2005. <u>http://www.wsp.org/wsp/hygiene-sanitation-water-toolkit/index.html accessed 12.04.14</u>
- [7] M. Sommer, "Where the Education System and Women's bodies Collide: The Social and Health Impact of Girls Experiences of Menstruation and Schooling in Tanzania," Journal of Adolescence, Vol. 33 (4), 2009, Pp. 521 - 529
- [8] N. Kristof & S. WuDuwunn, Half the Sky: Turning Oppression into Opportunity for Women Worldwide, Knopf, 2009
- [9] E. Oster & R. Thornton, "Menstruation, Sanitary Products and School Attendance: Evidence from Randomized Evaluation," American Economic Journal: Applied Economics, 2010, Pp. 1 - 13

- [10] G. Nanda, J. Lupele, and J. Theraldson, "Menstrual Hygiene Management among School girls in Eastern Province of Zambia: Qualitative Research Final Report," USAID/WASHplus, Washington, DC, 2016,
- [11] Curriculum Development Center, Zambia Education Curriculum Framework 2013, Lusaka, CDC, 2013
- [12] T. Crofts, "Will they Cotton on? An Investigation into Schools Girls Use of Low-cost Sanitary Pads in Uganda," Unpublished MSc Dissertation, WEDC, Loughborough University, UK, 2010
- [13] P. Montgomery, CR. Ryus, SC. Dolan, S. Dopson and L. M. Scott, "Sanitary Pad Interventions for Girls' Education in Ghana: A Pilot Study," PLoS One, Vol. 7 (10), 2012, Pp. 1 - 10
- [14] S. Cavill, T. Mahon & S. House, Menstrual hygiene matters; a resource for improving menstrual hygiene around the world, N/A: WaterAid, 2012

- [15] C. L. Travers, No one cares we're bleeding: the place of menstrual management in humanitarian response, Unpublished Master degree thesis in International Humanitarian Action, Uppsala University, 2015.
- [16] S. House, T. Mahon, and S. Cavil, Menstrual Hygiene Management Matters: A Resource for improving Menstrual Hygiene Management Around the World, 2013.
- [17] A. C. Neilson, Sanitation Protection: Every Women's Health Right, Plan, India, 2010
- [18] A. Fehr, Stress, Menstruation and School Attendance: Effects of Water Access among Adolescent Girls in South Gandar, Ethiopia, Care, 2010,
- [19] Government of the Republic of Zambia (GRZ), Menstrual Hygiene Management National Guidelines 2016, Ministry of Education, Lusaka, 2016