INCREASING ADOLESCENT GIRLS' SCHOOL ATTENDANCE IN EDUCATION IN SOME PRIORITY REGIONS OF CAMERON THROUGH MENSTRUAL HYGIENE MANAGEMENT

Pilot Report

EEF to add date of publication

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About the evaluator

Please fill in details of the evaluation team, including a contact email address here.

The Association for the Welfare of Women and Indigenous Persons (ASOWWIP) located in the North West Region of Cameroon in Central Africa in Partnership with Centre for the Development of Best Practices in Health (CDBP-H) was tasked with the execution of this evaluation.

NJI Valery CHE is a final year PhD candidate in Public Health at Texila American University. He has over 15 years of experience in project implementation and evaluation and served in the evaluation as the Principal Investigator (PI). In this capacity, he was responsible for the conception, implementation, and development of the study protocol as well as the reporting of the findings of the Menstrual Hygiene Management (MHM) Pilot Evaluation.

Ramatu Abdu who doubles as the Chief Executive Officer (CEO) of ASOWWIP coordinated the various activities and components of the evaluation team. Principally she was responsible for managing the logistics and serving as the point of contact between the evaluation team on the one hand and advisory panel on the other.

Prof Pierre Ongolo Zogo, is an Associate Professor in the University of Yaoundé I in Cameroon and has been acting as a health systems researcher in Africa for more than two decades. He is the head of CDBP-H, which is based in in Yaoundé Cameroon. He provided internal control, quality assurance and general supervision of the evaluation based in Cameroon.

Dr. Niying Roger Mbihbiih is an Assistant lecturer in the department of Women and Gender Studies in the University of Buea in Cameroon. He served as a senior researcher in the evaluation and together with the PI and was instrumental in the development of the inception reports, study protocol and provided valuable inputs to the final report.

Dr. Moustapha Nsangou holds a Ph.D in Sociology and is a Lecturer at the University of Yaoundé I. He served as the principal focal point with CDBP-H. He coordinated and supervised data collection activities in the Far North and East Regions of Cameroon and was instrumental in the analysis of qualitative data and reporting of the final results.

Dr. Cecile Bonono holds a Ph.D in Sociology and is a Lecturer at the University of Yaoundé I. She served as a Senior Researcher within the team and works with CDBP-H. She supervised data collection activities in the East Region of Cameroon and was instrumental in the analysis of qualitative data and reporting of the final results.

Executive summary

The project

Please provide the following details about the project as bullet points. EEF will use them to draft a section about the project. The length of the executive summary is limited to two pages:

This pilot MHM intervention in 15 schools across the North West, East and Far North Regions of Cameroon was aimed at increasing school attendance amongst adolescent school girls through the provision of Menstrual Hygiene Management Services in primary, secondary and high schools.
The intervention targeted female students/pupils in primary, secondary and high schools who experience challenges accessing Menstrual Hygiene Management (MHM) services and products such as sanitary pads, toilet soap, safe spaces and disposal facilities among others.
Female students aged between 10-20years and located in selected primary, secondary and high schools were the principal beneficiaries of the intervention.
The intervention comprised a one off distribution of dignity kits to 10,000 students comprised of 1 washable sanitary towel, 1 toilet soap, 2 underwear, 1 comb, 1 backpack on the one hand and the renovation of existing and/or construction of new WASH facilities (toilet, water points, safe spaces for hygiene and waste disposal site). Thirty focal point teachers, 2 per school were identified and trained in MHM and the focal points in turn cascaded the training to their colleagues in their respective schools. The Focal Points also served as supervisors of MHM clubs and equally created awareness within and amongst community members in the three regions, which benefitted from the MHM intervention. The implementation of these activities took place between January 2022-June 2022 (30 weeks).
The delivery team (UN-Women Cameroon) through its local implementing partners located in the various regions, together with focal point teachers in the identified schools delivered the intervention. Local implementing partners were Center for Advocacy, Gender Equality and Action for Development-CAGEAD (North West Region); Association des Femmes Africaine Integres pour la Reserche et le Development-AFAIRD (Far North Region) and; KMERPAD-(East Region).
The schools selected were identified by the delivery team (UN-Women), based on the classification of these three regions as priority education zones by Cameroon's Ministry of Secondary Education.
The evaluation adopted a mixed method design, which relied on both quantitative and qualitative methods. Attendance data was collected weekly for all the schools. Questionnaires, focus group discussion/key informant guides were administered in 9 out of the 15 schools. There were three phases of data collection; baseline, midline and end line. Students/pupils, teachers/school administrators and community members (traditional, religious and women/youth leaders) constituted the sample of the study even though female students constituted the principal unit of analysis. Data collection instruments included tools such as questionnaires, Key Informant Interview (KII) guides, Focus Group Discussion (FGD) guides, an attendance collection tool and an observation checklist. Primary quantitative data was collected with the use of the questionnaire survey tool while primary qualitative data was collected with the use of KIIs, FGD and observations checklists. Attendance data was collected through out the project implementation while primary quantitative data was collected at baseline and end line with the use of survey questionnaires designed according to three MHM principles (knowledge, attitudes and practices). At the midline and end line phases, qualitative data was privileged and was collected with the use of KIIs and FGDs from school administrators, teachers and community members. The study was developed around a Logic Model which identified project inputs and activities (MHM Delivery materials and local delivery and implementation support); features of comprehensive MHM' outputs and finally outcomes (both short term and long term).
The delivery phase of the pilot ran for a period of 8 months even though initial projections showed that the intervention would run for one academic year (October 2021-June 2022). The pilot went operational in January 2022 and came to an end in June 2022.

Figure 1: Summary of pilot findings

Research question	Finding
RQ 1: How does the intervention influence menstrual hygiene management practices among adolescent schoolgirls age 10 -20 years?	Of the 270 girls that participated in the quantitative survey, the findings revealed that at baseline only 66,6% of them were able to take care of themselves during menstruation while at end line 83,9% of them could take care of themselves at school during menstruation. These findings demonstrated that between baseline and end line, there was 17.5% improvement in the manner in which adolescent schoolgirls took care of themselves during menstruation. At baseline knowledge about menstruation was 89,4% while at end line this had progressed to 94,3% indicating 4.9% improvement. The findings from the quantitative results were equally supported by findings from the qualitative, which demonstrated that the MHM project had contributed in improving knowledge and awareness amongst adolescent girls in intervention schools.
RQ 2: How does the intervention influence understanding and	The qualitative findings revealed that as a result of sensitization carried out in the community on menstrual Hygiene Management, some community members do not see menstruation as a taboo subject. Parents of girls in the community accepted the kits provided by the project to the children in school. *"[...] It has been*

support for menstruating schoolgirls in the community?	*good; very, very, good one; first that myth has been broken; the silence has been broken; so it has been a good one and we hope that with time many people or our community why not the society at large, will see menstruation as something normal; something to be discussed; not as a taboo and they will integrate women who are on their periods into certain places like the mosque or other places; see menstruation and know that it is something natural [...]" Councilor GBHS Bamendakwe Bda: 26 – 26.*
RQ 3: How does the intervention influence adolescent girls' school attendance in beneficiary schools?	When we compared an aggregate of the 1st two weeks of February and the last two weeks of June, we can state that the was an improvement in attendance by 3% points between these two periods. However, we observed drops during the weeks of 11th February (Youth week), in March when the teachers were on strike, Easter holidays in April with zero attendance and 20th May 2022. Figure 1 presents a summary of attendance. *"Since the training, the absenteeism rate of girls in level two and three has dropped. At that time, when there was absenteeism, we did not detect the reasons. But with this training, we discovered that many girls who were absent for two or three days were absent not due to coughs, headaches or malaria, but because they were menstruating. They have understood that it is not an illness, that they must come to school even during their menstrual period and we have seen a change. The attendance rate has increased to more than 95% in the classrooms and it is already a big step." (EI_Teacher_Bta).*
RQ 4: Do there appear to be any unintended consequences or negative consequences associated with the intervention?	A key informant responded the following as unintended effect of MHM. *"[...] If we really teach them and the know well about their safe and unsafe period, some of them can go and start being promiscuous. That is the rate of promiscuity amongst young girls might increase". (EI_Teacher_Garoua).*
RQ 5: Does the community (parents and leaders) feel there is a need for the intervention?	''[...] *If this project can reach out to the nationwide then it would be something very good because they would come to realize the importance of menstruation in the life of their girl child and equally, they will not see menstruation as a taboo; not as something that is dirty; or mysterious but as a gift from God [...]" KII Mra: 52 - 52*
RQ 6: Do policymakers feel there is a need for the intervention? What specific needs does it address?	*"[...] Yes, you are aware that the State is responsible for the safety of students, and more so for young girls, and that is why for some time now, as part of the minimum package, since I have been in Bertoua I, the Mayor has managed to provide us with protection kits, but more is needed. However, with this, we already have enough to help if a young girl is in discomfort. We have something to give her at school to protect herself until she gets home. It's true, as I was saying, it's not always consistent or sufficient, but it's a good start. The Mayor of Bertoua I has often provided us with cottons for that [...]".KII Bonis Bte*
RQ 7: Has conflict impacted the acceptability of the intervention?	In the North West Region of the country, all Mondays have been declared as curfew days, so students do not go to school. Findings also revealed that the project was greatly affected by teachers strike which was not previewed from the outset. Other events that affected this intervention was 11th February and 20th May festivities.
RQ 8: Is there evidence to support the theory of change (ToC)? Are any adjustments to the logic model required?	Findings of this pilot revealed that there was acceptability of this intervention. Knowledge about MHM was gained amongst adolescent schoolgirls. Some cultural taboos and stereotypes about menstruation were broken. A number of points have been highlighted that will be factored into the theory of change before the trial.
RQ 9: Has the intervention been implemented as intended?	Findings from the evaluation indicated that the pilot was implemented as planned. The observation checklist designed by the evaluation team was used to ascertain this in the various intervention schools. However, construction of safe spaces was only realized at 60% in the East and Far North Regions. Challenges with construction in these two regions were highlighted and would be factored in the trial
RQ 10: Has there been sufficient demand from schools for the pilot? What is the likely demand/appetite for a full trial?	Findings from this implementation process evaluation demonstrated that schools, community members and the general education community in the selected regions manifested high levels of interest and demand for the intervention. This was evident by the high request and enthusiasm manifested by students, teachers and administrators of the beneficiary schools on the one hand and community members on the other hand. Views expressed by various key informants indicated that there was need to expand the delivery of the project to other regions.
RQ 11: Is the intervention feasible to deliver in schools (e.g. in terms of staffing, facilities, timetabling)? Would adjustments be	Again, findings demonstrated that the feasibility to deliver the intervention was high and palpable in the selected schools. The profile of the schools considered for the pilot intervention met the requirements of the pilot seeing that they possessed the necessary staff, facilities and organised their activities according to a national academic timetable. From the diagnostic analysis that was conducted, salient elements were identified in the various regions and schools considered for the intervention which ensured that the intervention could be delivered effortlessly. By taking into consideration the needs of the schools and the socio-cultural context of the regions, the operational posture of the delivery team through its local

needed for a full trial?	implementing partners ensured that the various components of the intervention were effortlessly delivered.
RQ 12: Were the safe spaces built to a uniform standard across the schools? Were these spaces well maintained throughout the pilot period? Would there be need for any support?	Based on qualitative findings recurring themes on the acceptability of MHM safe spaces, a majority of the responses were on a positive note. Respondents acknowledged the importance of the creation of safe spaces for effective MHM amongst adolescent girls. The renovation/construction of safe spaces ascribed to the standards provided by the delivery organization (UN Women). At end line, the observation checklist revealed that the safe spaces (for those that had been completed) were constructed and/or renovated to a uniform standard.
RQ 13: Has the intervention reached its intended student target group? Would adjustments be needed for a full trial?	The findings revealed that the intervention was delivered to the target group as intended. It was observed that the girls were very receptive of the dignity kits distributed by the delivery team in schools.
RQ 14: Has the staff training been effective in preparing staff to deliver the intervention? How effective was the training of trainers at regional levels? How effective was the training in schools? Would adjustments be needed for a full trial?	The staff training took place across all the regions as projected. This training was a key activity in the promotion of menstrual hygiene in the intervention schools. At midline, it was noted that, the teachers and peer educators had received training on MHM as indicated by a recipient teacher:
RQ 15: What **materials and support** have been provided to staff? How effective have they been in supporting staff to deliver the intervention? Have there been any issues with the quality and timeliness of support provided, given that programme staff are based in Yaoundé? Would adjustments be needed for a full trial? To what extent has the capacity and expertise of the partner organizations been built to run training and provide support should the intervention go to trial?	The findings revealed that materials and support provided to staff occurred in the form of trainings and the provisions of training modules for MHM club focal points. From the data, it was observed that recipients of the trainings appreciated the quality of the trainings and materials handed over for onward individual trainings. A cross section of those trained remarked that the material and training had improved on their capacity and knowledge regarding issues related to MHM.
RQ 16: What materials and support have been provided to the students? How effective have they been in supporting the students in the intervention? Have there been any issues with the quality and timeliness of support provided? Would	From the findings, all girls during the FGD remarked that, they benefitted from a wide range of materials and support in from the project. These included various components of the delivery package such as dignity kits, training of student leaders, construction/renovation of safe spaces and the creation and operationalization of MHM clubs. As previously indicated in this report, these various project components have significantly influenced the school attendance on the one hand, and knowledge, awareness and practices of female students' vis-à-vis MHM. However, the inability of delivery team to supply at a 100 percent the safe spaces as well as dignity kits in some regions seriously limited the effectiveness of the intervention. Necessary adjustments will need to be made in the case of a full trial.

adjustments be needed in a full trial?	
RQ 17: How effective were the MHM Clubs in schools? How many students registered as members of the Clubs? What were the activities carried out by the MHM Clubs? How often did the Clubs meet? What is the perception about the MHM Clubs in the schools?	The MHM clubs were very effective as evidenced from the testimonies of the respondents. A respondent remarked that. "If you are facing a challenge, the manual at the clubs have so many topics so, if we follow those topics and menstrual wheel, this helped them to better explain the menstrual issues to the girls and they see it demonstrated pictures […] Their support in the menstrual hygiene management club show their dedication. They are very active and they also try to step down of the knowledge they have gathered during the training to the other teachers but so far so good, the people that are really active in the club are the focal people, most of them are school counsellors." (KII Project staff CAGET, Bda). The majority of MHM clubs met once every week in their respective schools and had both boys and girls as members.
RQ 18: Have school staff been fully **engaged** in the intervention? Have there been any barriers to engagement (e.g. workload, time, expertise)? How, if at all, have these been overcome? Have any types of staff been more engaged in the programme than others?	A cross section of the students indicated that the focal points were very committed to the MHM pilot in the schools as they turn up for all the club activities, answered questions asked by the students amongst other club activities. A student remarked that, "*during the menstrual Hygiene day celebrated every **28th of May** out club carried out so many activities initiated by the focal points to celebrate this day. Because of this awareness, students now are conscious that such a day exists. Before, this day will just pass without us even noticing it. [FGD student East]*
RQ 19: Have students been fully engaged in the intervention? Have there been any barriers to engagement (e.g. prior knowledge, support needs, stigma)? How, if at all, have these been overcome?	It should be noted that the project has addressed issues that until now have been considered taboo in some cultural spaces, as this respondent states: *"The project was very welcome because our children really needed it. It was a very nice intervention and here, it was really a taboo subject. We didn't really talk about it and now I think that even the little time we spent in this institution helped a lot of children, because it is helpful." (EI_Resp_Etablissement_Mra).*
RQ 20: Are there effects of the intervention on other programmes or events?	Respondents indicated that UNICEF had carried out something similar in the East and Far North regions at one time.
RQ 21: Is this intervention suitable for a full trial? Do any changes need to be made to: the intervention theory; recruitment processes; construction of safe spaces; training; content and delivery mode; provision of support to staff; intervention materials (MHM supplies and communication material); project management?	From the findings obtained as highlighted under evidence to support the theory of change and feasibility of implementation of this intervention, we can conveniently state that this intervention should proceed to trial. The level of acceptability as demonstrated by the beneficiary schools, the adolescent girls and respective project stakeholders was quite remarkable. Eventhough it was observed that the major challenge was encountered with the construction of the safe spaces in the East and the Far North Regions of the Country, to move from pilot to trial some key strategic adjustments and considerations have to be made during the different phases of implementation.

RQ 22: What adjustments (if any) to the intervention can enhance its effectiveness in a full trial.	Key considerations and adjustments that have to be made to ensure success of the MHM intervention in a full trial would be the following: • Mapping and selection of schools should be done before the academic year commence. • Baseline data collection should be done at school resumption for all schools mapped for the trial. • The delivery team (UN Women) and its implementation partners should at the beginning of the academic year identified focal points. • There should be timely disbursement of funds to partners on the ground so that they can start construction of safe spaces and other components of the project on time. • The school calendar should be scrupulously respected and official events and holidays should be factored into project delivery and evaluation.
RQ 23: What adjustments (if any) to the intervention can enhance its effectiveness in a full trial	Key considerations and adjustments that have to be made to ensure success of the MHM intervention in a full trial would be the following: • Mapping and selection of schools should be done before the academic year commence. • Baseline data collection should be done at school resumption for all schools mapped for the trial. • The delivery team (UN Women) and its implementation partners should at the beginning of the academic year identified focal points. • There should be timely disbursement of funds to partners on the ground so that they can start construction of safe spaces and other components of the project on time. • The school calendar should be scrupulously respected and official events and holidays should be factored into project delivery and evaluation.
RQ 24: Can a sufficient number of schools be recruited to a trial?	Some participants even expressed that the project should be scale up to the entire country so that all girls should be aware and know how to effectively manage their periods. Sufficient number of schools can be recruited for the intervention within the ambits of the project budget.
RQ 25: Are there any key contextual factors that appear to facilitate or impede successful implementation (e.g. related to programme management; school or staff characteristics/circumstances, conflict, community-related factors)?	Schools were very receptive of this intervention from the qualitative responses under acceptability and feasibility.
RQ 26: Is the intervention likely to be affordable for schools? If the intervention is ready for a full trial, how should this be administered (e.g. selection of student target group and numbers; schools and localities targeted; measurement of primary and secondary outcomes; evaluation tools; and monitoring processes)?	Additionally a handful of stakeholders highlighted that the project was affordable. The dignity kits provided to girls could be washed and reused severally. A KI remarked the following: *"[…] Yes, the activities carried out are relevant. First of all, the kits are good. At the level of the PTA, we could also consider making some money available at the beginning of the school year to buy sanitary pads and keep in the constructed safe spaces for girls. The project is a good thing and we welcome AFRAID. I personally think that we should even extend it to universities." (EI_Enseignant_Mra).*

Additional findings

One interesting finding that came out of the research was the fact that parents at home equally expressed need for the dignity kits. This was same for the female teachers at school who felt that for an intervention of this magnitude happening in the schools, they would have been included as beneficiaries. They argued that MHM also concerned the female teachers.

Introduction

Background evidence

According to UNESCO, (2014), in sub-Saharan Africa, 1 in 10 girls do not attend school during their menstrual cycle, which some estimates note corresponds to 20% of the school time lost in a year. Unfortunately, Menstrual Hygiene Management (MHM) remains poorly understood in the education, Water Hygiene and Sanitation (WASH) and health sectors. High dropout rates and low completion rates persist among girls due to menstruation, inability to manage it as well as other puberty-related problems.

In Cameroon, inadequate knowledge on menstrual hygiene practices in schools, poor maintenance and inadequate school sanitation facilities used by girls during menstruation, and the negative impact of the absence of waste management systems on living conditions, have been identified as major challenges to proper MHM (WSSCC & UN Women, 2015). Likewise, some surveys on menstruation indicate that more than 70% of girls have only approximate knowledge about MHM, and do not engage discussions on sexual health with their families (WSSCC & UN Women, 2015).

A study by Crankshaw et al., (2020), produced varying results regarding the extent to which MHM or a menstrual safe space can reduce absenteeism among female students. As such, there were some indications to suggest that MHM management had an effect on school attendance of young girls. However, an important factor to consider is whether the causality between menstruation on the one hand and absenteeism on the other is robust and significant. For example, Ngeno (2019) revealed that lack of sanitary pads was one among many reasons for girls staying away from school. That notwithstanding and according to the just cited author, the provision of sanitary pads reduced absenteeism among girls by 29.89%. While this may be a commendable reduction, notwithstanding the improvement, there could be other menstruation-related factors contributing to absenteeism not addressed by the provision of sanitary pads. Results from qualitative studies have revealed further insights on experiences as well as stories around MHM in schools and communities in Africa (Chinyama et al., 2019; Rheinländer et al., 2019; Wall et al., 2018). Similar studies conducted in Nepal and sub-Saharan Africa suggested mixed results of some MHM approaches on attendance and performance (Ngeno, 2019; Oster & Thornton, 2009). However, these studies did not adequately reveal how MHM interventions can improve school attendance or performance.

A quasi-randomized control trial conducted in Uganda revealed that providing sanitary pads and puberty education had a positive impact on girls' school attendance (Montgomery et al., 2016). However, the intervention was limited due to the fact that sanitary pads and puberty education constituted the main input activities; the population considered was made up of only 8 schools and; the outcomes (school attendance) were also limited. In addition, there was an unexplained higher attrition rate in the control compared to the intervention group (40% difference with a 56% attrition), and there was a high risk of bias in the randomization process. A scoping review (Coast et al., 2019) highlighted that the body of evidence available for decision making lags behind the rise in interest from practitioners as well as the development (and evaluation) of puberty and/or menstruation interventions, thus the need for trustworthy evidence which this intervention intends to address.

A pilot intervention study on Menstrual Health Intervention and school attendance in Uganda (MENISCUS) revealed that MHM as a multi-component intervention was effective in improving menstruation knowledge, management, and was acceptable and feasible to deliver. This intervention prioritized teacher training on using a menstrual kit and pain management, a drama skit, provision of analgesics, and improvements to school water and sanitation hygiene facilities (Kansiime et al., 2020).

The MHM pilot project aimed to contribute towards improving the attendance of adolescent school girls through MHM activities and products in schools and communities in some priority education zones of Cameroon.

The inputs of this intervention identified by the logic model involved the distribution of dignity kits, construction of new and/or renovation of existing toilet and WASH facilities which served as safe spaces and addressed the MHM needs of girls whilst in school; trained teachers as MHM school focal points and coordinators of MHM clubs in school, and engaged with community youth, women and traditional leader.

Intervention

Schools

The implementation of the MHM pilot involved 15 schools (primary, secondary and high schools) from the East, Far North and North West Regions of Cameroon (5 schools from each of the 3 Regions).

School staff (those receiving training and delivering the intervention)

Each school nominated 2 staff members who received training and were supported in delivering MHM in their

respective schools. After the trainings, teachers as Teacher Leaders and MHM Focal Points in their respective schools. They in turn organized training for at least 15 staff members on MHM, and coordinated the activities of the MHM Clubs set up in their schools. Furthermore, as MHM Focal Points, the teachers ensured that the safe space were equipped by maintaining an inventory of menstrual hygiene materials available in these safe spaces at all times.

Students

From conception, the intervention targeted an estimated 10.000 female learners of menstruation age (10 to 20 years). From attendance records, the actual attendance of females in the 15 schools was 6.985. The female students benefited from the safe spaces set up in each school (more details are provided below). Each of the female students in the selected schools received a 'dignity kit' composed of a washable sanitary towel, toilet soap, underwear, comb, backpack, detergent, disposable sanitary pads, a toothbrush, and toothpaste. Also, the beneficiary girls were trained on the production of washable and reusable sanitary towels, as well as other MHM techniques.

MHM Clubs were set up in each of the selected schools. These clubs served as a platform to raise awareness within the school on MHM and provided relevant MHM training to students. The clubs also acted as space and opportunity male students to join discussions on MHM within the school milieu.

Community

In each of the communities where the schools were located, meetings were organized with parents and community leaders on MHM issues. These community members were sensitized on the importance of healthy MHM practices for female learners, and how communities can support female learners better deal with menstruation and its related issues

What was done

The following facilities and materials were provided:

Construction and/or renovation of menstrual hygiene safe spaces for girls: Existing toilets and WASH facilities were made gender sensitive and renovated in schools respecting the rules of safety and distance from boys. Also, a waste pit for the effective management and disposal of menstrual waste was constructed according to the specifications of the delivery team.

Provision of MHM supplies: The safe spaces for girls were equipped with materials for proper MHM such as washable and disposable sanitary towels, buckets, soap and pain killers that were delivered in bulk. The MHM Focal Points were responsible for and supervised (re) stocking MHM supplies and maintaining inventory in each school.

Specifically, female learners of menstrual age 10-20 in all schools considered for the intervention were provided with 'dignity kits' composed of:

- 01 washable sanitary towel,
- 01 toilet soap,
- 02 underwear,
- 01 comb,
- 01 backpack,
- 01 detergent,
- 16 re-usable sanitary towels,
- 01 toothbrush and;
- 01 toothpaste.

Training manuals: The training component involved the use of training manuals on MHM, provided to the trained teachers to facilitate their work on MHM in their respective schools. These manuals included UN Women Cameroon's training of trainers' (ToT) manual and UNICEF'S Wins (Wash in Schools) and MHM guide. These documents were been designed by UN Women in line with the three pillars of MHM, which were

a. **Breaking the silence on menstruation**: this aimed to normalize discussions on menstruation by encouraging users and participants to understand that menstruation is not a taboo but a normal phenomenon among girls and women which should not elicit sentiments of shame/ of which they should not be ashamed;
b. **Ensure safe and hygienic management of menstruation**. This aimed to build users' capacity on good menstrual hygiene practices;
c. **Safe disposal of menstrual waste**: this was meant to ensure that the safe disposal of menstrual products such as non-reusable pads and other related menstrual waste was done in an environmentally friendly and sustainable manner. .

Communication and reporting materials: Communication materials related to the MHM (brochures, leaflets, stickers, panels, giant wheels, etc.) were produced in French and English using locally available materials and technologies and provided to the schools identified for the intervention.

Research questions

The Research questions of this intervention were developed according to: (i) acceptability and evidence of promise; (ii) feasibility and scalability; (iii) readiness to be evaluated in a full trial and; (iv) criteria for moving from pilot to trial.

Acceptability and evidence of promise

Question 1: How does the intervention influence MHM practices among adolescent school girls aged 10 – 20 years?
Question 2: How does the intervention influence understanding and support for menstruating school girls in the community?
Question 3: How does the intervention influence adolescent girls' school attendance in beneficiary schools?
Question 4: Are there any **unintended or negative consequences** associated with the intervention?
Question 5: Does the community (parents and leaders) feel that there is a need for the intervention?
Question 6: Do policymakers feel there is a need for the intervention? What specific needs does it address?
Question 7: Has conflict impacted the acceptability of the intervention?
Question 8: Is there **evidence to support the theory of change** (ToC)? Are any adjustments to the logic model required?

Feasibility and scalability

Question 9: Has the intervention been implemented as intended?
Question 10: Has there been sufficient demand from schools for the pilot? What is the likely demand/appetite for a full trial?
Question 11: Is the intervention **feasible to deliver** in schools (e.g. in terms of staffing, facilities, timetabling)? Would adjustments be needed for a full trial?
Question 12: Were the safe spaces built to a uniform standard across the schools? Were these spaces well maintained throughout the pilot period? Would there be need for any support?
Question 13: Has the intervention reached its intended student target group? Would adjustments be needed for a full trial?
Question 14: Has the staff training been effective in preparing staff to deliver the intervention? How effective was the training of trainers at regional levels? How effective was the training in schools? Would adjustments be needed for a full trial?
Question 15: What **materials and support** have been provided to staff? How effective have they been in supporting staff to deliver the intervention? Have there been any issues with the quality and timeliness of support provided, given that programme staff are based in Yaoundé? Would adjustments be needed for a full trial? To what extent has the capacity and expertise of the partner organizations been built to run training and provide support should the intervention go to trial?
Question 16: What materials and support have been provided to the students? How effective have they been in supporting the students in the intervention? Have there been any issues with the quality and timeliness of support provided? Would adjustments be needed in a full trial?
Question 17: How effective were the MHM Clubs in schools? How many students registered as members of the Clubs? What were the activities carried out by the MHM Clubs? How often did the Clubs meet? What is the perception about the MHM Clubs in the schools?
Question 18: Have school staff been fully **engaged** in the intervention? Have there been any barriers to engagement (e.g. workload, time, expertise)? How, if at all, have these been overcome? Have any types of staff been more engaged in the programme than others?
Question 19: Have students been fully **engaged** in the intervention? Have there been any barriers to engagement (e.g. prior knowledge, support needs, stigma)? How, if at all, have these been overcome?
Question 20: Are there effects of the intervention on other programmes or events?

2.3 Readiness to be evaluated in a full trial

Question 21: is the intervention suitable for a full trial? Do any changes need to be made to: the intervention theory; recruitment processes; construction of safe spaces; training; content and delivery mode; provision of support to staff; intervention materials (MHM supplies and communication material); project management?
Question 22: What adjustments (if any) to the intervention can enhance its effectiveness in a full trial
Question 23: Is there potential for **contamination** in case of a trial? Where are the high points of contamination?
Question 24: Can a sufficient number of schools be recruited for a trial?
Question 25: Are there any key contextual factors that appear to facilitate or impede successful implementation (e.g. related to programme management; school or staff characteristics/circumstances, conflict, community-related

factors)?

Question 26: If the intervention is ready for a full trial, how should this be administered (e.g. selection of student target group and numbers; schools and localities targeted; measurement of primary and secondary outcomes; evaluation tools; and monitoring processes)?

2.4 Criteria for moving from Pilot to Trial

Responses to the research questions in 2.1, 2.2 and 2.3 were used to argue that the project can be scale to a trial. The various data tools were designed to capture all these questions. Results from data analysis of responses from the data collection tools were used to determine if the study can move from pilot to trial.

Ethical Review

In the course of the pilot ethical and administrative clearance was obtained from the Cameroon National Ethics Committee (CNEC). Documents for ethical clearance were submitted to the National Ethics Committee in February 2022.

To guarantee confidentiality and anonymity, some ethical rules were respected. An assent form was provided to girls aged between 0-18years old for their parents' consent. An informed consent form was administered in writing to all girls 18 – 20 years of age. Informed consent was sought from the parents/guardians for all participants in the study. Consent/assent forms included a description of the objectives of the intervention, the notion voluntary participation, the right to withdraw from the study at any time, and the right not to answer any questions. The consent forms also contained information on the risks, benefits and purpose of the study. Each form was co-signed by parents/guardians and the participants and verified by a team member who ensured that all participants informed consent had been provided.

Before data collection, the data collectors gave out consent and assent forms to the students, which were completed both by the participants and their parents before the survey. For parents who could not read, the participants were advised to solicit the services of more literate family members or neighbours in order to understand the information contained in the assent/consent forms. In some cases, the data collectors explained and clarified the consent and assent forms to parents/guardians since data collectors also come from the communities where the students lived.

Data Protection

This project, like all others, carried out by ASOWWIP, was governed by ASOWWIP's data protection policy. This included storing participants signed consent forms in a secured location and saving audio recordings and transcripts in an unshared Drop box folder. A data security plan was prepared, which included information such as the names of persons with access rights to respondent sensitive data, information about third parties (such as transcribers) involved in the project, and particular data disposal procedures. Data collected from the project was stored at the end of the project as this data could be useful during the trial.

All data collected during the study was be kept in strict trust by the ASOWWIP and CDBPH teams. eBASE only received anonymized findings. The research data gathered by ASOWWIP and CDBPH was not shared with anyone other than the parties listed. On the basis of anonymized findings, the research team developed a report for publishing results. The general public, as well as UN Women, CDBPH, eBASE, and EEF, did not have access to this. The reports written by ASOWWIP and CDBP ensured that opinions and views expressed by individual participants could not be directly linked back to them. During field observations, ASOWWIP and CDBPH took photos only after receiving written consent from the participants (in cases where the pictures involved participants).

Project Team

Team Members	Primary Role	Specific tasks within the Research
Evaluation Team		
Ramatu Abdu	General Coordinator	Coordinated activities among the different evaluation stakeholders. Planned and organized meeting updates with the different stakeholders. Ensured finance was readily available for the different stakeholders during the evaluation process
Pierre Ongolo	Quality Assurance Lead	Coordinated the field survey and the drafting of the final report
NJI Valery CHE	Principal Investigator	Participated in the development of the study protocol. Coordinated and produced final drafts of evaluation instruments and reports; supervised the process of data collection and management; coordinated and contributed to data processing, analysis, and reporting; liaised with all evaluation partners to ensure consensus and compliance with evaluation objectives, and other duties required to fulfil the evaluation mandate.
Niying Rogers	Senior Researcher	Contributed to the development of evaluation instruments and reports; Assisted the Principal Investigator (PI) in training enumerators and supervising data collection; Served as the primary point of contact with regards to working documents such as the child protection and data protection policies; sat in for the PI when he was unavailable; Supervised the collection of qualitative data in the North West Regio Participated in the development of literature review and logic model; Participated in writing all final reports of the intervention Performed other duties linked to the evaluation.
Moustapha Nsangou	Senior Researcher	Coordinated field survey data collection and analysis of research results in the East and Far North region; Contributed in writing all reports of the intervention. Participated in research team meetings and in drafting all reports of the intervention. Performed other duties linked to the evaluation.
Cecile Rene Bonono,	Senior Researcher	Coordinated the field survey and data collection in the East region and participated in the drafting of the report Participated in follow up the collection of qualitative data; Participate in the development of literature review and logic model; Performed other duties linked to the evaluation.
Kamga Emmanuel	Data Manager	Served as data lead; Participated the training of data collectors; Coded data collection instruments into data collection software; Ensured data quality and data cleaning.
Advisory Panel		
Jonah Bury	Member Advisory Panel	Provided technical support to the development of the study protocol Reviewed all reports produced by evaluation team Ensured that the study protocol was developed in line with best practice policies on pilot studies. Participated and contributed actively during weekly advisory panel meetings.
Janet Hatcher Roberts	Member Advisory Panel	Provided technical support to the development of the study protocol Reviewed all reports produced by evaluation team Ensured that the study protocol was developed in line with best practice policies on pilot studies. Participated and contributed actively during weekly advisory panel meetings.
Molly Scott	Member Advisory Panel	Provided technical support to the development of the study protocol Reviewed all reports produced by evaluation team Ensures that the study protocol is developed in line with best practice policies on pilot studies. Participated and contributed actively during weekly advisory panel meetings.
Daniel Philips	Member Advisory Panel	Provided technical support to the development of the study protocol and Logic Model Ensured that the study protocol was developed in line with best practice policies on pilot studies.

Team Members	Primary Role	Specific tasks within the Research
		Participated and contributed actively during weekly advisory panel meetings. Reviewed all reports produced by evaluation team

Methods

Recruitment of Schools

The delivery team identified 15 schools in the East, 15 in the Far North and 12 in the North West regions. These schools were selected based on a preliminary diagnosis commissioned by UN Women team (delivery team) in collaboration with the Ministries of Primary and Secondary Education visited in the months of November and December 2021. UN Women recruited a consultant (Dr. Moïse TAMEKEM NGOUTSOP) who carried out a diagnostic analysis using quantitative and qualitative data collection instruments. The findings from this diagnostic analysis enabled UN Women to select 5 schools from each region from the list of schools identified. The targets for the identification of eligible schools for the intervention were achieved in the towns of Bertoua (East Region) and Maroua (Far North Region), as planned. However, those of Bamenda (North West Region) were not reached as planned, due to constraints linked to the prevailing security situation in the region. Based on this early diagnosis, demographic data was fed into a database from which purposive sampling technique was conducted to select five schools per region (for a total of 15) from which delivery and assessment was carried out. The North West, Far North, and East Regions of Cameroon were the regions from which the schools were chosen.

The three regions were also selected as a result of conflicts, dangers, and stressors, which are known to exacerbate the vulnerabilities experienced by schoolgirls of menstrual age. In addition, the regions reflected and continue to represent a high-risk classification determined by the Ministries of Higher Education and Secondary Education. Another set of arguments for school selection was a pre-established criterion that highlighted specific characteristics that qualifying schools must possess, which was easily fulfilled by the selected regions.

Urban-rural, boarding and non-boarding, as well as religious and cultural considerations and sensitivities, informed the selection of these schools. The selected schools were classified according to the following three standards:

- Standard 01, represented schools with no MHM facilities and no school commitment to MHM;
- Standard 02, represented schools with no MHM facilities but school commitment to MHM; and
- Standard 03, represented schools with some MHM facilities and school commitment to MHM.

Sorting schools into three categories were considered in defining the services required to transition from one category to the next. For example, it was rationalized that there was no need to build separate facilities or a space for girls to handle menstruation in an eligible school, which already possessed those facilities. Rather, the intervention prioritized the renovation of these facilities. These criteria were established so as to group schools into categories, which allowed for comparisons of schools which shared similar characteristics.

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Recruitment of pupils and students

Students age 10-20years of age who had experienced menarche were considered eligible to participate in the study and to benefit from the resources (dignity kits, MHM safe spaces) linked to MHM intervention in the selected schools.

Consent for the pilot

Consent was sought from all the participants considered for the intervention. In the first place all participants age 18-20 years were required to demonstrate consent by reading, understanding and signing a consent form developed by the evaluation. This explained the rational and objectives of the study. For participants aged below 18years, they were required to secure written consent from their parents and guardians in the form of a signed assent.

Existing evidence for the intervention

- Explanation of the stage of development of the intervention
- Details of any relevant policy or practice context (eg, How widely is the intervention or similar interventions being used in schools? Is it relevant to any proposed or existing government policies?)
- The rationale for conducting the evaluation.

Data collection

This pilot research study used both qualitative and quantitative research methods.

Qualitative methods involved the use of Focus Group Discussion (FGD), Key Informant Interview (KII) and field observations guides. Quantitative data was collected using a questionnaire designed by the evaluation team. The

attendance of schoolgirls and boys was tracked using specially designed school attendance data collection tool in the selected schools. Attendance was recorded daily in schools by class teachers and prefects with the attendance tool developed by the research team.
In 9 of the 15 intervention schools, the baseline survey collected data on key outcomes from students. These outcomes were based on the three MHM principles and comprised knowledge, attitudes, and practices related to menstrual hygiene management. Qualitative interviews for teachers, school administrators and community members were conducted at midline and endline in nine schools, three from each region, to ensure a rural/urban balance and an appropriate mix of primary, secondary, and high schools. While key project staff were interviewed at the project offices, teachers, school administrators and community members were interviewed in their respective schools.
These interviews permitted the researchers to identify good practices in school governance related to menstrual hygiene management, and how well the intervention influenced those practices, the program's limitations, and any suggestions to improve the program's success. At midline data collectors conducted field observations to ensure effective program implementation. Attending MHM club activities, double-checking the physical inventory of MHM supplies, and confirming the presence of MHM supplies were just a few examples. The data collectors used the observation checklist to capture this. Where additional information was required, the data collectors used MHM Club registers and activity reports for MHM activities.

At end line, the researchers used an extended version of the baseline survey to capture perceptions of the intervention by students and teachers alongside the outcomes measured at baseline. This took place in all 9 schools. In the 9 case study schools studied at midline, field observations were used to check on project implementation, and key informant interviews addressed issues discussed at midline, including modifications based on what was learned from midline interviews. Also, key community members involved in school governance including Parent Teacher Association (PTA) executives, traditional authorities, and municipal authorities were interviewed at midline and end line.
This enabled an assessment of program acceptability and feasibility at the level of the community. These interviews also enabled an understanding of the relationship between schools and the community, and how these relationships affected the delivery of the intervention and its impact. Similarly, FGDs were organized with students in these schools, which also permitted an understanding of the mechanisms by which the intervention affected MHM practices among students.
Throughout the project, implementation was tracked by analyzing project records from schools and the delivery team. The type and nature of these records were subject to a data-sharing arrangement with the delivery team which included records of participation, inventories, and procurement. The attendance of school girls and boys was tracked using specially designed school attendance data collection tool in selected schools. Focal teachers from selected schools were trained and ensured attendance data was collected consistently and daily with the help of class heads. The use of class heads ensured consistent data because teachers are tasked with filling attendance records for their subject of instruction and these teachers do not teach every day. So it might prove challenging to get attendance records through teachers.
Data for this pilot evaluation was collected using the tools outlined below:

Focus Group Discussion Guide
This was a qualitative tool was used to collect primary data. Separate FGD guides for both boys and girls were developed. Each FGD session was made up of 6 boys separately and 6 girls for 9 schools in the 3 regions. Separate FGD for men and women was conducted in the community while for the boys and girls, this took place in the schools.
The guide was designed to capture the respective research questions. The FGD were organised at end line (June 2022). A moderator and recorder were present in the conduct of all FGDs. The evaluation team organized a briefing session for the FGD team on using the FGD guide.

Key Informant guide
Trained data collectors by the evaluation team interviewed key stakeholders such as School Administrators, Teachers, Parent Teacher Association (PTA) President, Students (Boys and Girls), Secondary and Basic Education Administrators, District Medical Officer, Councillors and Key Project Staff. While teachers, school administrators and community members were interviewed at the level of the schools, project staff on their part were interviewed at the level of the project office. Secondary and Basic Education Administrators, District Medical Officer and Councillors were interviewed in their respective offices.

There were 3 sessions of KIIs per school giving a total of 27 interviews for the 9 case study schools and 1 session of KII for the project staff for the project offices making three. One KII session was organised with Secondary and Basic Education Administrators, District Medical Officer and Councillors.

Observation checklist

Trained data collectors used an observation checklist to collect data on the activities delivered by UN Women partners in the schools. The data collectors used the observation checklist to verify the construction/renovation of the safe spaces, availability of dignity kits in schools, information regarding the training of two focal points, functional MHM clubs in schools and evidence of ongoing sensitization about MHM in the communities. This information was collected with the observation checklist at the baseline and endline phases of data collection.

Survey questionnaire

Data collectors administered a quantitative questionnaire, which captured knowledge, attitude and practice on MHM amongst girls. The sample size (270) was distributed per school as a function of the enrolment of girls in the school taking into consideration the total enrolment of girls in 9 schools. The table below give details of the sample per school based on the enrolment of girls.

For a school such as Cetic De Kongola in the Far North Region, the total enrolment of girls was 299. So to obtain 12 students to be interviewed, the data collectors attributed random numbers to all 299 girls. Using the RANDBETWEEN function on excel, the data collector gave a range between 1 and 299. Every time the data collectors clicked on the enter key with the randbetween formula on the excel, it generated a different number that corresponded to a girl on the register. This respondent was picked for the interview until a total of 12 girls had been picked. This approach was randomly was used to pick girls for the interview.

Table 1: Sample population of girls per school for the survey

Region	School Code	Type of school	Girls	Boys	Sample
Far North	FN01	Secondary	299	412	16
Far North	FN02	High School	516	700	28
East	E01	High School	783	954	43
North West	NW01	High School	774	1551	42
East	E02	High School	437	363	24
East	E03	High School	410	580	22
Far North	FN03	High School	335	519	18
North West	NW02	High School	835	1796	46
North West	NW03	High School	560	232	31
	Total		4949	7107	270

Attendance forms

Attendance was captured for school girls and boys using data entry tools designed by the evaluation for each of the schools. The attendance collected was a daily tally of the number of girls/boys present in school. This was consistent across all schools. Attendance was recorded every morning for primary schools by the class teacher and for secondary schools, this was recorded after every subject by the class prefect supervised daily by the class teacher. Attendance was collected for pupils of primary 5 and 6 in primary schools and for form one to upper sixth for secondary and high schools.

The attendance of boys was useful because it provided further context in interpreting results. Also, the attendance revealed that there were overall trends and fluctuations in student/pupil attendance rates during the year that affected both boys and girls. Data on the attendance of boys was not meant to serve as a comparison group, but to provide more context on school attendance trends/patterns between boys and girls.

The first phase of data collected for attendance data for selected schools served as baseline attendance data and the last phase of attendance data collected served as endline attendance data. Attendance data collected in the first two weeks was aggregated and averaged to serve as the baseline data. At endline, attendance data was aggregated for the last two weeks and averaged to serve as endline data.

The logic model for this pilot was developed to ascertain the relationship between menstrual hygiene management amongst adolescent school girls and school attendance rates. All project stakeholders in three project set-up meetings developed it at project inception.

The evaluation team recruited and trained data collectors who collected data at baseline, midline and endline. Prior to midline and endline, data collections received refresher training. Worth noting was, these data collectors came from the respective regions. The delivery team was in no way involved in the data collection process.

Timeline

Activities	Start date	End date	Person Responsible	Status
Preliminary diagnosis/Selection of 15 intervention schools	October 2021	December 2021	UN Women	Done
Construction/renovation of safe spaces in 15 intervention schools	December 2021	February 2022	Local partner organisation	
Ethical weaver	December 2021	January 2022	ASOWWIP/CDBPHS	
Baseline data collection	January 2022	January 2022	ASOWWIP/CDBPHS	
Data security Plan	December 2021	January 2022	ASOWWIP/CDBPHS	
Statistical Analysis Plan	February 2022	February 2022	SOWWIP/CDBPHS	
3-days training workshop for 30 teachers from 15 intervention schools	January 2022	February 2022	MINESEC/MINEDUB/UN Women	
1-day training workshop for 15 teachers in each of the intervention schools	February 2022	February 2022	Focal Points/Partner organisations	
Provision of ‘dignity kits’ to 10,000 female learners in the intervention schools	February 2022	February 2022	UN Women/Partner organisations/Focal Points	
Equipping the safe spaces with menstrual hygiene management supplies	February 2022	February 2022	UN Women/Partner organisations/Focal Points	
Creation and running of MHM Clubs in intervention schools	February 2022	May 2022	UN Women/Partner organisations/Focal Points	
Training workshops in intervention schools on the production of washable and reusable sanitary pads	February 2022	April 2022	UN Women/Partner organisations/Focal Points	
Production and distribution of MHM communication materials	January 2022	May 2022	UN Women/Partner organisations/Focal Points	
Midline data collection	April 2022	May 2022	ASOWWIP/CDBPHS	
Community sensitisation meetings	February 2022	May 2022	UN Women/Partner organisations/Focal Points	
Project implementation monitoring	November 2021	June 2022	UN Women/Partner	
Endline data collection	June 2022	June 2022	ASOWWIP/CDBPHS	
Reporting	July 2022	June 2022	UN Women/Partner	

Findings

Description of the schools involved in the pilot

Table 2: Description of the schools involved in the pilot

Region	Type of school	Urban/ Rural	Total Enrolment	Girls	Boys	No of toilets for girls	Total No. of Girls' Toilets Based on Ratio of 1:300	No of Additional Toilets Needed Based on Ratio of 1:300	Remark
Far North	Secondary	Rural	711	299	412	0	1	1	C
Far North	High School	Urban	1216	516	700	1	2	1	C
East	High School	Urban	1737	783	954	2	3	1	C
Far North	Primary	Urban	700	318	382	1	1	0	R
East	Primary	Urban	1071	554	518	2	2	0	R
North West	Primary	Urban	555	267	288	1	1	0	R
North West	High School	Urban	2325	774	1551	3	3	0	R
East	High School	Urban	800	437	363	2	1	-1	R
East	High School	Urban	990	410	580	2	1	-1	R
East	Primary	Urban	739	380	359	2	1	-1	R
Far North	High School	Urban	854	335	519	2	1	-1	R
North West	Primary	Urban	590	300	289	2	1	-1	R
North West	High School	semi	2631	835	1796	8	3	-5	R
Far North	Primary	Urban	427	217	210	3	1	-2	R
North West	High School	Urban	792	560	232	8	2	-6	R
			16138	6,985	9153		23		

Participants that were involved in the pilot and any attrition
Of all 270 respondents both boys and girls that were involved in the study, there was no attrition observed in the pilot.

Evidence to support theory of change

To ascertain if and whether the Menstrual Hygiene Management (MHM) intervention in schools caused an improvement in the major outcome of interest for this study, which was improvement in school attendance amongst adolescent girls, we analysed weekly school attendance of adolescent girls age 10 to 20years longitudinally from February 2022 to June 2022. We administered a quantitative survey for girls and boys and obtain responses to support the outcome of interest as well as qualitative data analysis from the Focus Group Discussion (FGD) and key informant interviews (KII).

Of the 270 girls that participated in the quantitative survey, the findings revealed that at baseline only 66,6% of them were able to take care of themselves during menstruation while at end line 83,9% of them could take care of themselves at school during menstruation. These findings demonstrated that between baseline and end line, there was 17.5% improvement in the manner in which adolescent schoolgirls took care of themselves during menstruation. At baseline knowledge about menstruation was 89,4% while at end line this had progressed to 94,3% indicating a 4.9% improvement. These findings were supported by findings from the qualitative, which demonstrated that the MHM project had contributed in improving knowledge and awareness amongst adolescent girls in intervention schools. Respondents of the Key informant interviews expressed the following:

"[...] The thing is that, most of the girls now understand their menstrual cycle, which is something that has been handled by the project coming with beads, teaching them practically how to use the beads to calculate their next menstrual cycle has really helped them. The complains we had at the office of Madam, I am stained and need to go home has really dropped "[...] (090622 KII focal point Bda: 20 - 20).

"[...] It has really help us a lot; it has helped us to know how to calculate our menstrual cycle. At first, I never knew how to do that but now I can do that with no stress at all; I really do appreciate them" 110522KII Student Bayelle Bda: 66 - 66

"[...] We say that it is not a taboo subject, we must talk about it, educate young girls and boys so that they know that it is a natural thing. I think that it is the awareness and advice that can be given on how to deal with it when it happens," (Focal point_Mandjou).

"[...] Some of the activities of the club include eh an increased knowledge on menstrual hygiene management for example, the focal points, they have a manual which they follow; they have lesson guides on it, teaching the girls for example, how to care for their menstrual material, how to wash their pants, sundry them, how many times they should change their pad, how to dispose of their used pad, effects of not properly managing themselves during menstruation and the diseases they are exposed to." (090622 KII Project staff CAGEAD:74-74 Bda).

Analysis of the schools attendance indicated that the school attendance amongst adolescent girls was above 90% during the intervention. When we compared an aggregate of the 1st two weeks of February and the last two weeks of June, we can state that the was an improvement in attendance by 3% points between these two periods. However, we observed undulations during the weeks of 11th February (Youth week), in March when the teachers were on strike, Easter holidays in April with zero attendance and 20th May 2022. Figure 1 presents a summary of attendance.

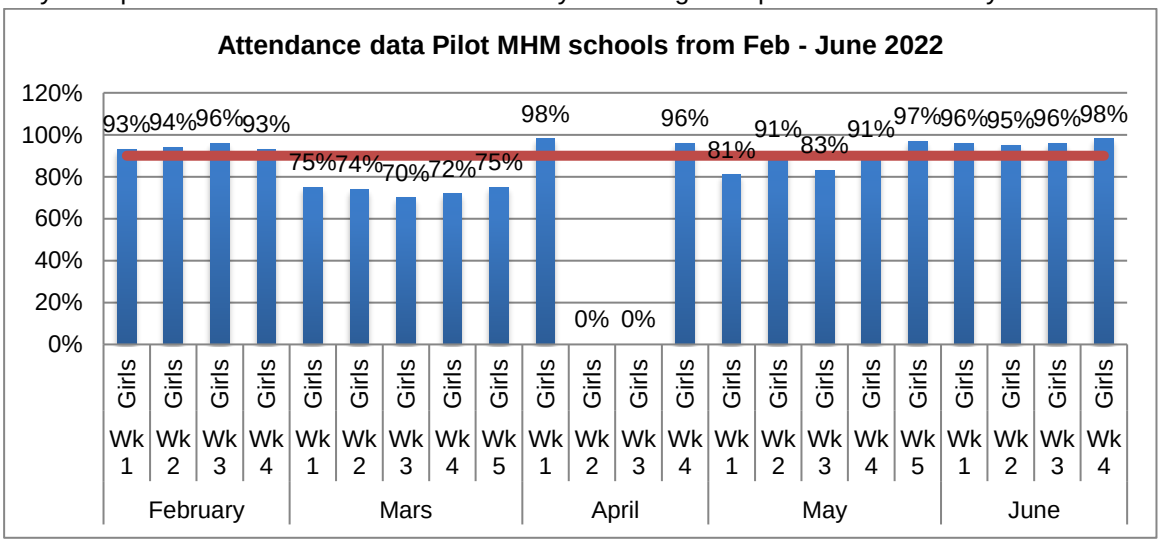

Figure 1: Attendance data Pilot MHM schools from Feb - June 2022

The quantitative findings further revealed that at baseline 66.6% of adolescent girls were confident taking care of themselves during menstruation while attending school whereas at end line 83.9% of the girls felt more confident of taking care of themselves during menstruation while attending school. This demonstrated a 17.3% points improvement in the confidence of girls in taking care of themselves and attending school during menstruation.

Findings from the qualitative survey further corroborated those from the quantitative, which indicated that the intervention had caused girls to be more regular in school as mentioned by the following respondents.

"[...] Since they already know that a toilet has been built for them, they will be no need staying at home saying that you will not come to school because you will not have a place to change your pad at least it has really helped us in a way that we now come to school we have our water, we do our things as we do them at home". 090622 KII Student GBHS Bayelle Bamenda: 64 – 64

During the implementation of the project one of the intervention package was to distribute menstrual hygiene management kits to adolescent girls between the ages of 10 to 20 years. Based on qualitative reviews, a majority of respondents had recurring themes on the acceptability of MHM kits. Views expressed by the respondents supported the acceptability of the kits as stated below:

"[...] It is not something you will use just for once and throw it. It will always be there that you can use for a length of time. The project now teaches, the girls how to make their own reusable pads. You see that this one is sustainability [...]" FGD Community Members Bayelle Bda: 308 - 308

"We have discovered that the children are very excited about the reusable pad and other items distributed [...]"Teacher KII GPS Old Town Bda: 20 - 20

"[...] They are enjoying it because we now have our secret place which is well furnished; it's filled with water though we've run short of water now but at first when they just came up with the idea, we loved it and we are really enjoying it; and more to that we have learned how to handle our menstrual life so nicely with no worries 110622 KII student Bda: 30 – 30.

"[...] I think that the quality is great, the girls appreciated the content of the packages delivered to them. In fact, they are so happy, some of the parents in the community, they testify that their kids brought home such big packs to support menstruation and the timing as well was proper timing" 090622 KII Project staff CAGET: 66 – 66.

"I'll like to appreciate them; they are very good and as a person I really wish I could produce them like make mine and use; I really like it[...] 110622kII student Bda: 50 – 50.

"[...] They were so good especially the reusable ones; they gave us a room to the sanitize them before reusing them; they were very nice and till now I still use mine and I take care of it"110522 KII girl Bayelle (1): 34 - 34.

MHM Safe Spaces

Based on qualitative findings, we had 100% recurring themes on the acceptability of MHM safe spaces by the stakeholders. All stakeholders within the study accepted and acknowledged that creation of safe spaces in schools enormously assisted adolescent girls in MHM. This could be seen from the comments of respondents as highlighted below.

"[...] The place is quiet and nice; it's in an environment whereby there is no disturbance there are free toilets; there are like 6 toilets; 6 rooms there; even if three persons go there at once, no one will stress anybody. When you are done cleaning yourself, there is a mirror you can check yourself and arrange your uniform with no interruption 110622 KII student Bayelle Bamenda: 40 – 40.

"[...] At first, they knew that when they come to school, there would be no space for them to change and even take care of themselves during their menstrual period but with this project, it has helped and we know that we need no stress at all the place is free and kept safe for us to change and clean ourselves at any moment we want rather than staying back home saying that there's no place for us to take care of ourselves, it will inconvenient us but for now we are free. We are okay with it" 110522KII student Bayelle (1): 68 - 68

"[...] We have seen our beautiful toilets "councilor GBHS Bamendakwe.Bda: 38 - 38

" It is very nice and advantageous to the girls and mostly girls that are financially down. At least when they experience their period, they can at least take care of their selves without making someone to know about it "KII BOY: 26 - 26

"[...] You have constructed toilets and the toilets are going to be everlasting. It will always be there. Children will be going and coming, going and coming. Generation to generation "FGD Community Members Bayelle Bda: 305 - 305

"I think that the toilet is great first because it is away from classrooms. Yes, it's not situated so close to the classrooms and the location of the toilet is in such a way that the girls feel comfortable to go there" 090622 KII focal point Bayelle: 22 - 22 .

"[...] For example in Bayelle if you see the before and after picture, you'll see the complete transformation. The girls have a place where they can come in put their bags, remove their pad, A place where you can douche, clean up properly and dispose of their pads " KII Project staff CAGET: 32 – 32.

"It's nowhere close to another facility that is being used by boys and it gives them the privacy that is needed. So I think that position of the toilet is quite good ". KII focal point Bda: 22 – 22.

MHM Clubs

MHM Clubs were very instrumental in awareness creation and improvement of MHM practices in schools and in the communities. This improvement was seen in the activities and knowledge conveyed by the clubs set up in the schools, as indicated by the following respondents:

"[...] They came here in school, they taught us how to make menstrual beats FGD GBTHS student Bda: 123 - 123

"[...] First, they were shy to talk about menstruation since it was sometimes regarded as a taboo topic but with the coming of CAGEAD (delivery team) and the existence of the menstrual hygiene management club and its activities that has been going on, I think those peer educators are doing their best because I see them talking about menstruation freely now on campus"KII councilor GBHS Bamendakwe Bda: 4 - 4

"I think that it has been a booster to them. First to their psychology and including the boys who are in the club, they talk about menstruation; they see it; they are proud to buy pads for their sisters; at first, they used to go with a black plastic but now they are free; it's something good to them; so, I think that it has given them a positive thinking about menstruation ". councilor GBHS Bamendakwe: 40 - 40

" The boys are so involved. And they want to get the education and go and train their sisters back at home. Generally, we noticed during our club activities, the boys come up with the most questions and their zeal to actually participate in the project is quite good, quite great and they're taking it back home 090522 KII focal point Bayelle Bda: 40 - 40

"[...] So, having these menstrual hygiene management clubs, it has really given most of the girls an opportunity to learn a lot about how to manage their menstruation, how to manage themselves in schools, even back at home, freely talk about menstruation, debunk myths and erase taboos. 090622 KII Project staff CAGET: 70 - 70

"[...] So, everybody wants to join the club because they have seen their friends talking about it "[...] Madam GPS Old Town: 28 – 28.

The overall acceptability level of the intervention was impressive from the perspective of a cross section of stakeholders who held positive views about the intervention as expressed in the following comments.

"[...] I want that let the project continue moving on to many schools so that they may learn about menstrual hygiene [...]" Endline KII Pupil GPS Old Town Bda 48 – 48.

"[...] I want to tell them that, thank you, thank you for them, because they are helping us too to know to learn some things. The things that we do not know, they are helping us today and they are helping us with pads Endline KII Pupil GPS Old Town Bda: 69 – 69.

''[...] I want to, I want to tell them that, thank you, because.....let, the project begin to grow higher than higher, it should not go backward. Let God continue to intervene in the project [...]" KII Pupil GPS Old Town Bda 71 - 71

*''[...] We should use the …. Um … we should build them … yes for the schools that don't have toilets … they should do the same things for them for instance build them toilets and give them these … um… and equally give them the same things that were given to us like pads; at least that will make them know more about it"*110522kII student Bayelle Bda: 88 – 88.

''[...] It's a nice project and I think it will continue because it's really doing a great job in the life of my fellow students; it has made them to be able to stand on their feet like I see them do; they now concentrate in class due to the help you guys are giving us; this is the help we're getting [...]" 110522kII student Bayelle: 92 – 92.

''[...] Because menstruation is a global something that will affect all girls. Bringing it only to the students of GTC, will not help other students from other schools. Taking it round, will improve on the menstrual hygiene cycle all over [...]" Endline FGD GBTHS Bda student: 163 – 163.

''[...] If this project can reach out to the nationwide then it would be something very good because they would come to realize the importance of menstruation in the life of their girl child and equally, they will not see menstruation as a taboo; not as something that is dirty; or mysterious but as a gift from God [...]" KII Mra: 52 - 52

Feasibility

Implementation of the intervention

Findings from the evaluation indicated that the pilot was implemented as planned. The observation checklist designed by the evaluation team was used to ascertain this in the various intervention schools. However, construction of safe spaces was only realized at 60% in the East and Far North Regions as seen on the table below. Challenges with construction in these two regions were highlighted and would be factored in the trial.

Table 3: Implementation of MHM interventions in the three regions

Interventions	Level of implementation (%)		
	Far North	East	North West

Creation and operation of MHM clubs	100	60[1]	100
Distribution of kits	50	100	90
Training of focal points	100	100	100
Construction of infrastructure (construction of toilets, water points, etc.)	60	60	100
Raising awareness on MHM	100	100	100
Training of peer educators on MHM	0	0	0
Training of community and religious leaders on MHM	100	100	100
Training of teachers on MHM	100	100	100

Demand for the Project

On demand for the intervention, findings from this implementation process evaluation demonstrated that schools, community members and the general education community in the selected regions manifested high levels of interest and demand for the intervention. This was evident by the high request and enthusiasm manifested by students, teachers and administrators of the beneficiary schools on the one hand and community members on the other hand. Views expressed by various key informants indicated that there was need to expand the delivery of the project to other regions.

The coordinator of the delivery team in Meskine Government High School noted that, *"there was a need to extend it to all regions because it is important, just as it was done here so i therefore desire for it to be extended to other areas". "So you can see that a project that already addresses the health security of the young girl in a general way, can only be accepted with one heart. We really thanked them and we trust that it will not only stop here, but that this project will be extended to other schools. I say in the same way that you got here with us, you can also do it in other areas really (KII_Head Teacher Tigaza)".*

Similarly the Guidance Counsellor in Meskine Government High School indicated "*I think that the activity that you are doing should be extended to all schools, to raise awareness more and more, especially during the school year when all the students are available*".

Also, students who were very appreciative of the intervention particularly as it relates to their awareness of practices concerning their sexual and reproductive health rights expressed demand for the project. In that regard, a pupil noted "*I want to tell them, thank-you, thank-you for them, because they are also helping us to learn some things. The things that we do not know, they are helping us today and they are helping us with pads*" (*KII Pupil GPS Old Town, Bda).*

From these views highlighted above, it became apparent that there was a high demand for the intervention to scale to a trial that would have a wider coverage and target more beneficiaries.

Feasibility of Delivery and Need for Adjustments in case of a Full Trial

Again, findings demonstrated that the feasibility to deliver the intervention was high and palpable in the selected schools. The profile of the schools considered for the pilot intervention met the requirements of the pilot seeing that they possessed the necessary staff, facilities and organised their activities according to a national academic timetable. From the diagnostic analysis that was conducted, salient elements were identified in the various regions and schools considered for the intervention which ensured that the intervention could be delivered effortlessly. By taking into consideration the needs of the schools and the socio-cultural context of the regions, the operational posture of the delivery team through its local implementing partners ensured that the various components of the intervention were effortlessly delivered.

Standard, Maintenance and Support of Safe Spaces

Based on qualitative findings recurring themes on the acceptability of MHM safe spaces, a majority of the responses were on a positive note. Respondents acknowledged the importance of the creation of safe spaces for effective MHM amongst adolescent girls. The renovation/construction of safe spaces ascribed to the standards provided by the delivery organisation (UN Women). At end line, the observation checklist revealed that the safe spaces (for those that had been completed) were constructed and/or renovated to a uniform standard. The following views on the standard, maintenance and support for the safe spaces have been presented below:

"[...]*In Bayelle if you see the before and after picture, you'll see the complete transformation. The girls have a place where they can come in put their bags, remove their pad, A place where you can douche, clean up properly and dispose of their pads" (KII Project staff CAGET)*;

"[...] The place is quiet and nice; it's in an environment whereby there is no disturbance there are free toilets; there are like 6 toilets; 6 rooms there; even if three persons go there one time, no one will stress anybody. When you done cleaning yourself, there is a mirror you can check yourself and arrange your uniform with no interruption" (KII student GBHS Bayelle Bamenda);

"[...] We have seen our beautiful toilets" (Counsellor GBHS Bamendakwe):

"[...] Toilets have been constructed and those toilets are going to be everlasting. It will always be there. Children will be going and coming, going and coming from one generation to another generation (FGD Community Members Bayelle Bamenda).
"[...] For a greater sustainability, everyone in school has to be engaged in the management of these safe spaces not leaving the girls who are using it. Everyone, including the boys, including the teachers follow up on the cleaning on proper usage, disposing the used pads, burning them up and things like that and not destroying the property so that it will go a long way to support the girls who are coming after these ones that will graduate from school [...]" (KII Project staff CAGET Bamenda)

Intended student target group
The findings revealed that the intervention was delivered to the target group as intended. It was observed that the girls were very receptive of the dignity kits distributed by the delivery team in schools.

Staff Training
The staff training took place across all the regions as projected. This training was a key activity in the promotion of menstrual hygiene in the intervention schools. At midline, it was noted that, the teachers and peer educators had received training on MHM as indicated by a recipient teacher: *"[…] Yes, there were two workshops. The first one was for teachers and/or school leaders and the second was for student representatives, also known as peer educators. On 23 and 24 February 2022, the president of the PTA, the chairperson of APPS and myself attended the MHM workshop organised by KMERPAD." (KII Teacher, Bertoua).*
Similarly, another teacher lauded the effectiveness of the training with the view that: *"[…] As a teacher and from a pedagogical approach, I found the training to be of high quality regarding the modules that were developed. I saw in the modules professionalism and the trainers really put their finger on what is said among the students in our schools. For a long time, we considered menstruation a taboo topic, it was not talked about, shameful, the cause of abandoning school, but with this training we understood that on the contrary, when a girl is menstruating, she, her parents and all of us must be proud; because it confirms that she is 'still fresh' and that others should not consider it as a taboo subject, but rather help her to manage the situation, to protect herself, so she could be hygienic. In other words, it is a normal phenomenon and should not be considered as something taboo." (KII, Teacher Bertoua).*

Materials and support provided to Staff
The findings revealed that materials and support provided to staff occurred in the form of trainings and the provisions of training modules for MHM club focal points. From the data, it was observed that recipients of the trainings appreciated the quality of the trainings and materials handed over for onward individual trainings. A cross section of those trained remarked that the material and training had improved on their capacity and knowledge regarding issues related to MHM.

Material and support provided to student?
From the findings, all girls during the FGD remarked that, they benefitted from a wide range of materials and support in from the project. These included various components of the delivery package such as dignity kits, training of student leaders, construction/renovation of safe spaces and the creation and operationalization of MHM clubs. As previously indicated in this report, these various project components have significantly influenced the school attendance on the one hand, and knowledge, awareness and practices of female students' vis-à-vis MHM. However, the inability of delivery team to supply at a 100 percent the safe spaces as well as dignity kits in some regions seriously limited the effectiveness of the intervention. Necessary adjustments will need to be made in the case of a full trial.

Effectiveness of MHM Clubs
The MHM clubs were very effective as evidenced from the testimonies of the respondents. A respondent remarked that. "*If you are facing a challenge, the manual at the clubs have so many topics so, if we follow those topics and menstrual wheel, this helped them to better explain the menstrual issues to the girls and they see it demonstrated pictures […] Their support in the menstrual hygiene management club show their dedication. They are very active and they also try to step down of the knowledge they have gathered during the training to the other teachers but so far so good, the people that are really active in the club are the focal people, most of them are school counsellors." (KII Project staff CAGET, Bda).*
The majority of MHM clubs met once every week in their respective schools and had both boys and girls as members.

Description of information on MHM clubs in secondary schools

Variables	Endline	Baseline
Do you know if there is an MHM club or equivalent in your school?		
Yes	191(62,2)	140(26,0)
No	63(20,5)	268(49,6)
Don't know	53(17,3)	132(24,4)
Frequency of club activities		
Weekly	114(54,8)	46(32,5)
Every fortnight (two weeks)	46(22,1)	13(9,4)

Variables	Endline	Baseline
Every month	41(19,7)	34(24,4)
Other	7(3,4)	15(10,7)
Don't know	0	32(23,1)
Knowledge of meeting days		
Yes	30(16,6)	46(32,5)
No	93(51,4)	99(67,5)

Readiness for trial

From the findings obtained as highlighted under evidence to support the theory of change and feasibility of implementation of this intervention, we can conveniently state that this intervention should proceed to trial. The level of acceptability as demonstrated by the beneficiary schools, the adolescent girls and respective project stakeholders was quite remarkable.

Eventhough it was observed that the major challenge was encountered with the construction of the safe spaces in the East and the Far North Regions of the Country, to move from pilot to trial some key strategic adjustments and considerations have to be made during the different phases of implementation.

Additionally a handful of stakeholders highlighted that the project was affordable. The dignity kits provided to girls could be washed and reused severally. A KI remarked the following: *"[…] Yes, the activities carried out are relevant. First of all, the kits are good. At the level of the PTA, we could also consider making some money available at the beginning of the school year to buy sanitary pads and keep in the constructed safe spaces for girls. The project is a good thing and we welcome AFRAID. I personally think that we should even extend it to universities." (EI_Enseignant_Mra).*

Key considerations and adjustments that have to be made to ensure success of the MHM intervention in a full trial would be the following:

- Mapping and selection of schools should be done before the academic year commence.
- Baseline data collection should be done at school resumption for all schools mapped for the trial.
- The delivery team (UN Women) and its implementation partners should at the beginning of the academic year identified focal points.
- There should be timely disbursement of funds to partners on the ground so that they can start construction of safe spaces and other components of the project on time.
- The school calendar should be scrupulously respected and official events and holidays should be factored into project delivery and evaluation.

Should the trial factor all these challenges as key lessons learnt from the pilot and make the necessary adjustments, then the project could reasonably and effectively scaled up and replicated to other regions that are not yet in the project.

Conclusion

Taking into cognizance the findings obtained from acceptability, feasibility and readiness for trail, we can conveniently say that the intervention was very effective in the respective schools in the 3 regions. Lessons learnt from this pilot will be incorporated for the trial phase.

Table 4: Summary of pilot findings

Research question	Finding
RQ 1: How does the intervention influence menstrual hygiene management practices among adolescent schoolgirls age 10 -20 years?	Of the 270 girls that participated in the quantitative survey, the findings revealed that at baseline only 66,6% of them were able to take care of themselves during menstruation while at end line 83,9% of them could take care of themselves at school during menstruation. These findings demonstrated that between baseline and end line, there was 17.5% improvement in the manner in which adolescent schoolgirls took care of themselves during menstruation. At baseline knowledge about menstruation was 89,4% while at end line this had progressed to 94,3% indicating 4.9% improvement. The findings from the quantitative results were equally supported by findings from the qualitative, which demonstrated that the MHM project had contributed in improving knowledge and awareness amongst adolescent girls in intervention schools.
RQ 2: How does the intervention influence understanding and support for menstruating schoolgirls in the community?	The qualitative findings revealed that as a result of sensitization carried out in the community on menstrual Hygiene Management, some community members do not see menstruation as a taboo subject. Parents of girls in the community accepted the kits provided by the project to the children in school. *"[...] It has been good; very, very, good one; first that myth has been broken; the silence has been broken; so it has been a good one and we hope that with time many people or our community why not the society at large, will see menstruation as something normal; something to be discussed; not as a taboo and they will integrate women who are on their periods into certain places like the mosque or other places; see menstruation and know that it is something natural [...]" Councilor GBHS Bamendakwe Bda: 26 – 26.*
RQ 3: How does the intervention influence adolescent girls' school attendance in beneficiary schools?	When we compared an aggregate of the 1st two weeks of February and the last two weeks of June, we can state that the was an improvement in attendance by 3% points between these two periods. However, we observed drops during the weeks of 11th February (Youth week), in March when the teachers were on strike, Easter holidays in April with zero attendance and 20th May 2022. Figure 1 presents a summary of attendance. *"Since the training, the absenteeism rate of girls in level two and three has dropped. At that time, when there was absenteeism, we did not detect the reasons. But with this training, we discovered that many girls who were absent for two or three days were absent not due to coughs, headaches or malaria, but because they were menstruating. They have understood that it is not an illness, that they must come to school even during their menstrual period and we have seen a change. The attendance rate has increased to more than 95% in the classrooms and it is already a big step." (EI_Teacher_Bta).*
RQ 4: Do there appear to be any unintended consequences or negative consequences associated with the intervention?	A key informant responded the following as unintended effect of MHM. *"[...] If we really teach them and the know well about their safe and unsafe period, some of them can go and start being promiscuous. That is the rate of promiscuity amongst young girls might increase". (EI_Teacher_Garoua).*
RQ 5: Does the community (parents and leaders) feel there is a need for the intervention?	"[...] *If this project can reach out to the nationwide then it would be something very good because they would come to realize the importance of menstruation in the life of their girl child and equally, they will not see menstruation as a taboo; not as something that is dirty; or mysterious but as a gift from God [...]" KII Mra: 52 - 52*
RQ 6: Do policymakers feel there is a need for the intervention? What specific needs does it address?	*"[...] Yes, you are aware that the State is responsible for the safety of students, and more so for young girls, and that is why for some time now, as part of the minimum package, since I have been in Bertoua I, the Mayor has managed to provide us with protection kits, but more is needed. However, with this, we already have enough to help if a young girl is in discomfort. We have something to give her at school to protect herself until she gets home. It's true, as I was saying, it's not always consistent or sufficient, but it's a good start. The Mayor of Bertoua I has often provided us with cottons for that [...]".KII Bonis Bte*
RQ 7: Has conflict impacted the acceptability of the intervention?	In the North West Region of the country, all Mondays have been declared as curfew days, so students do not go to school. Findings also revealed that the project was greatly affected by teachers strike which was not previewed from the outset. Other events that affected this intervention was 11th February and 20th May festivities.
RQ 8: Is there evidence to support the theory of change (ToC)? Are any	Findings of this pilot revealed that there was acceptability of this intervention. Knowledge about MHM was gained amongst adolescent schoolgirls. Some cultural taboos and stereotypes about menstruation were broken. A number of points have been highlighted that will be factored into the theory of change before the trial.

adjustments to the logic model required?	
RQ 9: Has the intervention been implemented as intended?	Findings from the evaluation indicated that the pilot was implemented as planned. The observation checklist designed by the evaluation team was used to ascertain this in the various intervention schools. However, construction of safe spaces was only realized at 60% in the East and Far North Regions. Challenges with construction in these two regions were highlighted and would be factored in the trial
RQ 10: Has there been sufficient demand from schools for the pilot? What is the likely demand/appetite for a full trial?	Findings from this implementation process evaluation demonstrated that schools, community members and the general education community in the selected regions manifested high levels of interest and demand for the intervention. This was evident by the high request and enthusiasm manifested by students, teachers and administrators of the beneficiary schools on the one hand and community members on the other hand. Views expressed by various key informants indicated that there was need to expand the delivery of the project to other regions.
RQ 11: Is the intervention feasible to deliver in schools (e.g. in terms of staffing, facilities, timetabling)? Would adjustments be needed for a full trial?	Again, findings demonstrated that the feasibility to deliver the intervention was high and palpable in the selected schools. The profile of the schools considered for the pilot intervention met the requirements of the pilot seeing that they possessed the necessary staff, facilities and organised their activities according to a national academic timetable. From the diagnostic analysis that was conducted, salient elements were identified in the various regions and schools considered for the intervention which ensured that the intervention could be delivered effortlessly. By taking into consideration the needs of the schools and the socio-cultural context of the regions, the operational posture of the delivery team through its local implementing partners ensured that the various components of the intervention were effortlessly delivered.
RQ 12: Were the safe spaces built to a uniform standard across the schools? Were these spaces well maintained throughout the pilot period? Would there be need for any support?	Based on qualitative findings recurring themes on the acceptability of MHM safe spaces, a majority of the responses were on a positive note. Respondents acknowledged the importance of the creation of safe spaces for effective MHM amongst adolescent girls. The renovation/construction of safe spaces ascribed to the standards provided by the delivery organization (UN Women). At end line, the observation checklist revealed that the safe spaces (for those that had been completed) were constructed and/or renovated to a uniform standard.
RQ 13: Has the intervention reached its intended student target group? Would adjustments be needed for a full trial?	The findings revealed that the intervention was delivered to the target group as intended. It was observed that the girls were very receptive of the dignity kits distributed by the delivery team in schools.
RQ 14: Has the staff training been effective in preparing staff to deliver the intervention? How effective was the training of trainers at regional levels? How effective was the training in schools? Would adjustments be needed for a full trial?	The staff training took place across all the regions as projected. This training was a key activity in the promotion of menstrual hygiene in the intervention schools. At midline, it was noted that, the teachers and peer educators had received training on MHM as indicated by a recipient teacher:
RQ 15: What **materials and support** have been provided to staff? How effective have they been in supporting staff to deliver the intervention? Have there been any issues with the quality and timeliness of support provided, given that programme staff are based in Yaoundé? Would adjustments be needed for a full trial?	The findings revealed that materials and support provided to staff occurred in the form of trainings and the provisions of training modules for MHM club focal points. From the data, it was observed that recipients of the trainings appreciated the quality of the trainings and materials handed over for onward individual trainings. A cross section of those trained remarked that the material and training had improved on their capacity and knowledge regarding issues related to MHM.

To what extent has the capacity and expertise of the partner organizations been built to run training and provide support should the intervention go to trial?	
RQ 16: What materials and support have been provided to the students? How effective have they been in supporting the students in the intervention? Have there been any issues with the quality and timeliness of support provided? Would adjustments be needed in a full trial?	From the findings, all girls during the FGD remarked that, they benefitted from a wide range of materials and support in from the project. These included various components of the delivery package such as dignity kits, training of student leaders, construction/renovation of safe spaces and the creation and operationalization of MHM clubs. As previously indicated in this report, these various project components have significantly influenced the school attendance on the one hand, and knowledge, awareness and practices of female students' vis-à-vis MHM. However, the inability of delivery team to supply at a 100 percent the safe spaces as well as dignity kits in some regions seriously limited the effectiveness of the intervention. Necessary adjustments will need to be made in the case of a full trial.
RQ 17: How effective were the MHM Clubs in schools? How many students registered as members of the Clubs? What were the activities carried out by the MHM Clubs? How often did the Clubs meet? What is the perception about the MHM Clubs in the schools?	The MHM clubs were very effective as evidenced from the testimonies of the respondents. A respondent remarked that. "If you are facing a challenge, the manual at the clubs have so many topics so, if we follow those topics and menstrual wheel, this helped them to better explain the menstrual issues to the girls and they see it demonstrated pictures […] Their support in the menstrual hygiene management club show their dedication. They are very active and they also try to step down of the knowledge they have gathered during the training to the other teachers but so far so good, the people that are really active in the club are the focal people, most of them are school counsellors." (KII Project staff CAGET, Bda). The majority of MHM clubs met once every week in their respective schools and had both boys and girls as members.
RQ 18: Have school staff been fully **engaged** in the intervention? Have there been any barriers to engagement (e.g. workload, time, expertise)? How, if at all, have these been overcome? Have any types of staff been more engaged in the programme than others?	A cross section of the students indicated that the focal points were very committed to the MHM pilot in the schools as they turn up for all the club activities, answered questions asked by the students amongst other club activities. A student remarked that, "*during the menstrual Hygiene day celebrated every **28th of May** out club carried out so many activities initiated by the focal points to celebrate this day. Because of this awareness, students now are conscious that such a day exists. Before, this day will just pass without us even noticing it. [FGD student East]*
RQ 19: Have students been fully engaged in the intervention? Have there been any barriers to engagement (e.g. prior knowledge, support needs, stigma)? How, if at all, have these been overcome?	It should be noted that the project has addressed issues that until now have been considered taboo in some cultural spaces, as this respondent states: *"The project was very welcome because our children really needed it. It was a very nice intervention and here, it was really a taboo subject. We didn't really talk about it and now I think that even the little time we spent in this institution helped a lot of children, because it is helpful." (EI_Resp_Etablissement_Mra).*
RQ 20: Are there effects of the intervention on other programmes or	Respondents indicated that UNICEF had carried out something similar in the East and Far North regions at one time.

events?	
RQ 21: Is this intervention suitable for a full trial? Do any changes need to be made to: the intervention theory; recruitment processes; construction of safe spaces; training; content and delivery mode; provision of support to staff; intervention materials (MHM supplies and communication material); project management?	From the findings obtained as highlighted under evidence to support the theory of change and feasibility of implementation of this intervention, we can conveniently state that this intervention should proceed to trial. The level of acceptability as demonstrated by the beneficiary schools, the adolescent girls and respective project stakeholders was quite remarkable. Eventhough it was observed that the major challenge was encountered with the construction of the safe spaces in the East and the Far North Regions of the Country, to move from pilot to trial some key strategic adjustments and considerations have to be made during the different phases of implementation.
RQ 22: What adjustments (if any) to the intervention can enhance its effectiveness in a full trial.	Key considerations and adjustments that have to be made to ensure success of the MHM intervention in a full trial would be the following: • Mapping and selection of schools should be done before the academic year commence. • Baseline data collection should be done at school resumption for all schools mapped for the trial. • The delivery team (UN Women) and its implementation partners should at the beginning of the academic year identified focal points. • There should be timely disbursement of funds to partners on the ground so that they can start construction of safe spaces and other components of the project on time. • The school calendar should be scrupulously respected and official events and holidays should be factored into project delivery and evaluation.
RQ 23: What adjustments (if any) to the intervention can enhance its effectiveness in a full trial	Key considerations and adjustments that have to be made to ensure success of the MHM intervention in a full trial would be the following: • Mapping and selection of schools should be done before the academic year commence. • Baseline data collection should be done at school resumption for all schools mapped for the trial. • The delivery team (UN Women) and its implementation partners should at the beginning of the academic year identified focal points. • There should be timely disbursement of funds to partners on the ground so that they can start construction of safe spaces and other components of the project on time. • The school calendar should be scrupulously respected and official events and holidays should be factored into project delivery and evaluation.
RQ 24: Can a sufficient number of schools be recruited to a trial?	Some participants even expressed that the project should be scale up to the entire country so that all girls should be aware and know how to effectively manage their periods. Sufficient number of schools can be recruited for the intervention within the ambits of the project budget.
RQ 25: Are there any key contextual factors that appear to facilitate or impede successful implementation (e.g. related to programme management; school or staff characteristics/circumstances, conflict, community-related factors)?	Schools were very receptive of this intervention from the qualitative responses under acceptability and feasibility.
RQ 26: Is the intervention likely to be affordable for schools? If the intervention is ready for a full trial, how should this be administered (e.g. selection of student	Additionally a handful of stakeholders highlighted that the project was affordable. The dignity kits provided to girls could be washed and reused severally. A KI remarked the following: *"[…] Yes, the activities carried out are relevant. First of all, the kits are good. At the level of the PTA, we could also consider making some money available at the beginning of the school year to buy sanitary pads and keep in the constructed safe spaces for girls. The project is a good thing and we welcome AFRAID. I personally think that we should even extend it to universities." (EI_Enseignant_Mra).*

target group and numbers; schools and localities targeted; measurement of primary and secondary outcomes; evaluation tools; and monitoring processes)?	

Formative findings

- Provision of pocket calendars as part of the MHM kits for adolescent girls.
- Delays in project implementation linked to new financial regulations in country that affected timing of activities that required funding. We suggest an 80% to 20% disbursement plan from funders.
- Provision of MHM kits to female teachers in school because it was observed that some female teachers wanted to receive the kits as well.

Interpretation

The main objective of this pilot intervention was to increase school attendance amongst adolescent girls in three priority regions through MHM services and facilities. Through the various components of the intervention delivery, an improvement in attendance rates could be observed within the period of the intervention. Attendance, which was the key outcome measure of the evaluation, was attained in the schools and regions. Through an analysis of the weekly attendance records of the selected schools, it was realized that there was an observed 3% improvement in attendance rates comparing baseline and end line attendance. From the results, the key outcome measure was successfully attained. This was manifested through the observed changes that occurred at the level of the short and long term outcomes. For the short-term outcomes, the results revealed that the knowledge of female students regarding MHM improved significantly in between the baseline and endline periods. This can be attributed to the presence and participation of female students in MHM club activities, sensitization and awareness campaigns, which were implemented as part of the intervention. This improvement in knowledge on MHM was manifested through greater understanding and awareness of MHM concepts and principles and a change in the perception surrounding MHM. In fact, it can summarized that, as a result of the intervention, the negative perception, notions and taboos that was frequently attributed to menstruation was changed among female students particularly given that their knowledge level had improved on the subject. There was a general shift in discussions and notions about MHM with the conclusion that menstruation was a natural phenomenon, which needed to be viewed as reproductive and public health need. Interestingly as well, the intervention was able to change the perception and attitudes of some boys regarding MHM, who no longer used menstruation as an excuse to stigmatise against female students. In fact, from the qualitative results, it was apparent that boys, who participated in MHM club activities, understood how their attitudes towards menstruating girls could be transformed.

Similarly, the practices of female students vis-à-vis MHM improved significantly during the period of the intervention. Through the provision of dignity kits, the availability of safe spaces, and the provision of a disposal pit, adolescent girls could better manage the various challenges usually attached to MHM. It was realized that, access to reusable pads, towels, and other products contained in the dignity kits greatly increased the ability of girls to attend school when they were menstruating. This was further facilitated by the presence of safe spaces such as modern toilets, which permitted the girls to douche and clean themselves while in school. The intervention was therefore able to equip both students and teachers with vital resources on MHM. The training sessions and community awareness campaigns as well as the other components of the study cumulatively led to an improvement in attendance rates of girls in schools which was the long term outcome measure of this intervention. Even though improved performance, was not the key outcome variable of this intervention, it possible to suggest and strongly argue that, increased attendance rates inevitably and positively led to increased performance of female students. Similarly, the inclusion of MHM as part of the school curriculum could be viewed as another positive fallout of this intervention. Even though changes in the school curriculum must undergo a formal policy process in Cameroon, the results revealed that the interest manifested by school administrators, students and other education stakeholders with the MHM delivery (MHM clubs and MHM training manuals) could become permanent aspects of educational activities of the selected schools across the three

regions of Cameroon. From the foregoing, it can be observed that the theory of change was attained in terms of the short term and long term outcomes.

Feasibility

Regarding the feasibility of the intervention and its delivery, overwhelming evidence supported that argument that the intervention was highly feasible in its implementation. The delivery was carried out as planned, despite challenges with components such as distribution of dignity kits and the construction of safe spaces. The revealed that the operational and logistical dimensions of the intervention were appropriate and responded to the requirements of the project. Similarly, the demand for the project and the justification to implement a full trial was very high among the various schools and communities across the three regions. Specifically, there was unanimous plea from all stakeholders involved in this pilot that the intervention should be scaled and extended to other regions of the country. In fact, so huge was the demand that, even parents of girls who benefited from the dignity kits, also indicated that they would like to benefit from the dignity kits themselves. This high demand for the intervention can be explained by the prevalence of socio-cultural, religious and economic factors, which coalesce to render management an urgent need in primary and secondary schools in Cameroon. The absence of any robust policy on MHM in schools further justifies why the need and demand for the intervention was so high. Additionally, considering that schools in Cameroon (whether in urban and/or rural context) share similarities with regards to the state of MHM management, very few adjustments will be needed in the event that this intervention is scaled to a full trial. The vast majority of schools in Cameroon are in need of urgent intervention regarding MHM. As such the potential and ability of the intervention to be successfully implemented at the level of a full trial and its ability to engineer significant social change with regards to MHM in Cameroonian society is very high.

The ability of the local implementing partners to deliver on the various components of this pilot intervention was very high. The result revealed that the components of the intervention were successfully delivered to the beneficiary schools with the recipients as well as other stakeholders overwhelmingly manifesting satisfaction for the range of services rendered by the implementing partners. The safe spaces were renovated and/or constructed according to a specified standard, which relied on the needs and context of the recipient schools. The transformation of the safe spaces had implications on how MHM activities were undertaken in these schools. The evaluation team through the use of its observation checklist confirmed the uniform standard of the safe spaces. Moreover, from the results, the beneficiary schools indicated they were impressed with the standards, had the capacity to maintain the quality of the safe spaces and requested support only in terms of restocking the safe spaces with dignity kits. The target group of the intervention were female students (aged 10-20years) who were generally viewed as vulnerable group but who's vulnerability status was heightened in context of conflicts was ideal for the intervention. The effect of the intervention on their school attendance was significant seeing that their attendance rates improved significantly. This target group was appropriate for the pilot considering that existing literature on the issue has revealed that on average one in ten girls miss school as a result of menstruation. Considering the gender-biased context of Cameroon, which tends to discriminate and stigmatise against women and girls and use menstruation as justification for this discrimination, the potential of this intervention to address this situation is very high.

In addition, the results indicated that staff training was a successful and transformative with regards to MHM. Teachers who were trained and certified by the local implementing partners successfully cascaded the training to their colleagues. This has transformed the mindset of education stakeholders who will always carry the knowledge gained and the resources received with them. The trainings were also significant because they enabled staff to use a standardize tools developed by UN Women in addressing MHM activities. The impact of these trainings were felt in the field in terms of the role of MHM focal persons and coordinators of MHM club activities who had a mastery of the subject matter as well as strategies to manage students experiencing MHM complication in school setting. Furthermore, the approach used to train the teachers could be replicated in other regions in the event of a full trail which would ensure the same results. The various module used in these training were tailor made to respond to all aspects of MHM as it pertains to awareness, practices and knowledge. This constituted an important aspect of the materials and support provided to the staff. The data from the field supports the view that the trainings were highly effective in equipping teachers committed to MHM in schools.

Furthermore, the students who participated in this study benefited and appreciated the wide range of resources that were put at their disposal. The wide range of support received enabled the students to remain committed in the intervention. Our findings revealed that, female students were particularly appreciative of the dignity kits, safe spaces

and MHM clubs. It was our understanding from the data collected that the materials provided to students was very significant in sustaining their interest in the intervention. Satisfaction was also demonstrated with regards to the contents of the dignity kits. Infact, vulnerable female students such as IDPs and those from very poor background indicated that the dignity kits was life saver. Similarly, the interest in MHM clubs and the various animations which were organised in the clubs was instrumental in changing mind sets and engendering social change.

Readiness for trial

From the findings obtained as highlighted under evidence to support the theory of change and feasibility of implementation of this intervention, we can conveniently state that this intervention should proceed to trial. The level of acceptability as demonstrated by the beneficiary schools, the adolescent girls and respective project stakeholders was quite remarkable.

Even though it was observed that the major challenge was encountered with the construction of the safe spaces in the East and the Far North Regions of the Country, to move from pilot to trial some key strategic adjustments and considerations have to be made during the different phases of implementation.

Additionally a handful of stakeholders highlighted that the project was affordable. The dignity kits provided to girls could be washed and reused severally. A KI remarked the following: *"[…] Yes, the activities carried out are relevant. First of all, the kits are good. At the level of the PTA, we could also consider making some money available at the beginning of the school year to buy sanitary pads and keep in the constructed safe spaces for girls. The project is a good thing and we welcome AFRAID. I personally think that we should even extend it to universities." (EI_Enseignant_Mra).*

Key considerations and adjustments that have to be made to ensure success of the MHM intervention in a full trial would be the following:

- Mapping and selection of schools should be done before the academic year commence.
- Baseline data collection should be done at school resumption for all schools mapped for the trial.
- The delivery team (UN Women) and its implementation partners should at the beginning of the academic year identified focal points.
- There should be timely disbursement of funds to partners on the ground so that they can start construction of safe spaces and other components of the project on time.
- The school calendar should be scrupulously respected and official events and holidays should be factored into project delivery and evaluation.

Should the trial factor all these challenges as key lessons learnt from the pilot and make the necessary adjustments, then the project could reasonably and effectively scaled up and replicated to other regions that are not yet in the project.

Future research and publications

Suggestions for future trial methodology, including design and outcome measures

On future design methodology, we would still consider a mixed method design.

We could also consider female student academic attainment as a long-term outcome measure.

Future research questions that need answering should be specified

- What is the effect of menstrual hygiene management on adolescent girls academic attainment?
- How can menstrual hygiene management be integrated into the school curriculum in Cameroon?

Any further publications coming out of the evaluation should be signposted.

- Challenges of implementing of menstrual hygiene management in a security compromised setting
- The role of community and education stakeholders in menstrual hygiene management in schools in Cameroon

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Appendices:

Ethical Waiver

COMITE NATIONAL D'ETHIQUE DE LA RECHERCHE POUR LA SANTE HUMAINE

Arrêté N° 0977/A/MINSANTE/SESP/SG/DROS/ du 18 avril 2012 portant création, organisation et fonctionnement des comités d'éthique de la recherche pour la santé humaine au sein des structures relevant du Ministère en charge de la santé publique

N° 2022/04/1830/L/CNERSH/SP

Yaoundé, le 27 Avril 2022

setcominac@gmail.com

LETTRE D'INFORMATION

Le Comité National d'Ethique de la Recherche pour la Santé Humaine (CNERSH), en sa session extraordinaire du 27 avril 2022, a examiné le projet de recherche intitulé : **«Increasing Adolescent Girls' School Attendance in Education in Cameroon through Menstrual Hygiene Management»** soumis par le **Docteur NJI Valery CHE,** Investigateur Principal, Association for the Welfare of Women and Indigenous People.

Le Comité a formulé les observations et suggestions suivantes :

Titre :
- Le titre et les objectifs de l'étude ne sont pas en congruence

Objectifs
- Reformuler les objectifs de l'étude afin qu'ils correspondent au titre

Méthodologie
- Décrire la méthodologie de façon plus détaillée
- Réajuster la période d'étude

Considérations éthiques :
- La notice d'information n'est présente qu'en français : la traduire en anglais, y intégrer l'adresse du CNERSH ainsi que les risques et les bénéfices pour chaque type de population.
- Dans le formulaire de consentement éclairé, faire mention de la possibilité de se retirer de l'étude sans préjudice.

Considérations administratives
- Joindre un budget en devise locale.
- Fournir l'autorisation de principe du Délégué de la Région d'étude.

Conclusion :
- Il ne s'agit pas d'un projet de recherche mais d'un programme dont l'intérêt est indéniable. Sa mise en œuvre ne nécessite pas l'obtention d'une clairance éthique.

Ampliations

MINSANTE

Le Président par Intérim

Dr ATONG Bwemba Thérèse

Questionnaire on Menstrual Hygiene Management for Schoolgirls

Region: North West = 0; Far North = 1; East = 2

Name of the interviewer: _____

Name of the school: _____

Section A: Demographic Data

Instructions: Write in the Response column the number that corresponds to the right answer.

SN	QUESTIONS	RESPONSE
A01	AGE (Years)	[_____]
A02	SEX Male: 0 Female: 1	[_____]
A03	Class in school	
A04	Religion: **Christian = 0 Muslim = 1 other = 2**	[_____]
A05	Marital Status of parents: **Married = 0, Never Married = 1 Widowed = 2, Divorced/Separated = 3, others =4, Deceased = 5 Don't know = 6**	[_____]
A06	Educational level of mother: **FSLC =0, Ordinary Level = 1, Advanced Level = 2, Bachelors Degree = 3, Masters = 4, PhD = 6**	[_____]

Section B: Knowledge

SN	QUESTIONS	RESPONSE
B01	Have you ever heard about menstruation? **Yes = 0, No =1, Don't know =2**	[_____]
B02	If yes, where did you hear about menstruation? *Pick all that apply* **Friends = 0, Mother = 1, Other relative = 2, Neighbour = 3, Teacher = 4, Others = 5, Don't know = 6**	[_____]
B03	Have you experienced your first menstrual flow **Yes = 0, No = 1, Don't know =2 Others** _____ _____	
B04	At what age did you experience your first menstrual flow?	[_____]

Section C: Attitude

SN	QUESTIONS	RESPONSE
C01	Have you been absent from school in the last 14 days? Yes = 0, No =1, Don't know =2	[_____]
C02	If yes, what was the reason for absenteeism? No payment of fees = 0 I had to attend to other duties = 1 Menstruation = 2 Lack of money or transport to reach school = 3 Illness or injury = 4 Others (specify) = 5	[_____]
C03	Does menstruation ever prevent you from going to school? **Yes = 0 No = 1, Don't know =2**	[_____]
C04	If yes, why: Absence of sanitary pads = 0 Intense menstrual pains = 1	[_____]

	Being shy = 2 Cultural reasons = 3 Lack of space to change in school = 4 Others (specify)_____= 5	
C05	Do you usually inform your parents when you are menstruating? **Yes = 0, No = 1 Don't know =2**	[_____]
C06	Do you usually experience pains when you are menstruating? **Yes = 0, No = 1, Don't know =2**	[_____]
C07	Do you think it is important to discuss the topic of menstruation amongst boys? **Yes = 0, No = 1 Don't know =2**	[_____]

Section D: Practice

SN	QUESTIONS	RESPONSE
D01	What type of materials do you usually use during menstruation? **Sanitary pad = 0, Piece of cloth = 1, Tissue paper = 2,** **Herbs (Grass) = 3, Dust = 4, others = 5**	[_____]
D02	On a typical day when you are menstruating, how many times per day do you change your sanitary pad/materials during menstruation? **Once = 1, Twice =2, Thrice =3, Four times =4, Others (Specify) =4**_____	[_____]
D03	Where do you dispose of sanitary pad after use? **Pit toilet =0, Flushing toilet = 1, Dustbin = 2, In the Bush (open field) = 3, Others = 4**	[_____]
D04	Has your school ever provided you with any supplies to help you during menstruation? For example – sanitary pads, soap, underwear or a bag to keep sanitary pads in? **Yes = 0, No = 1, Don't know =2**	[_____]
D05	Do you know if there exist MHM clubs in your school? **Yes = 0, No = 1, Don't know =2**	[_____]
DO6	If yes, how often do the clubs take place? **Weekly = 0, every 2-weeks = 1, every month = 2**	
D07	If yes, do you know the days and **Yes = 0, No = 1, Don't know =2**	[_____]
D08	How often do the MHM clubs have their activities? **Once a week = 1, Twice a week = 2, Every two weeks =3, Once a month = 4**	
D09	Have you every attended the MHM club in your school **Yes = 0, No = 1, Don't know =2**	[_____]
D10	If, yes many times have you attended this club in your school? **Never = 0** **Sometimes, = 1** **Often, or Always = 2** **Rarely (e.g. 1-2 times) = 3**	[_____]
D10	If you have never attended the school club, why not I didn't know the club exist = 0 I didn't know what happens at the club or who they are for = 1 I didn't know what day or time the club meets up = 2 The clubs are not held at a time when I can attend = 3 I don't think the clubs will be relevant or interesting to me = 4 I am afraid or shy to join the club = 5 Other reason = 6	[_____]
D11	Do you think MHM club activities are relevant to improve on MHM? **a. Strongly agree = 0** **b. Agree = 1** **c. Neutral = 2** **d. Disagree = 3** e. **Strongly disagree = 4**	[_____]
D12	Do you think that the activities of the MHM club are relevant to improving the MHM? • **Strongly agree = 0** • **Agree = 1**	[_____]

	• **Neutral = 2** • **Disagree = 3** • **Strongly disagree = 4**	
D13	Are you more confident about taking care of yourself during your period and going to class/school because of menstrual hygiene management in your school? **Yes = 0, No = 1, Don't know = 2**	[_____]
D14	Do teachers in your school talk about the MHM? **Yes = 0, No = 1, Don't know = 2**	[_____]
D15	Are male students in favour of the MHM? **Yes = 0, No = 1, Don't know = 2**	[_____]
D16	Would you like to see a menstrual hygiene management intervention conducted in other schools? **Yes = 0, No = 1, Don't know = 2**	[_____]

The responses you have provided to this questionnaire will be kept confidential.

Thanks for Responding to our questions

DAILY ATTENDANCE REGISTER FOR MHM in Schools

ATTENDANCE REGISTER
Please use this form to record the total number of girls and boys attending school every day. This information will be used to help assess the results of the Menstrual Hygiene programme-taking place in this school. Please do not write down any information about individual pupils on this form. The focal person in the schools will be required to submit a scanned copy of this form weekly to the project team via email once it has been filled for the week OR send snap and send on whatsapp. The email address to be used in sending the attendance data weekly is ***kemma2000@gmail.com/njival@yahoo.com*** *or send on whatsapp using 675365535/677325809*

School name: _____

School term: _____

Year group/ class: _____

Number of girls enrolled at start of term: _____

Number of boys enrolled at start of term: _____

Date *(DD/MM/YYYY)*	**Girls attending**	**Boys attending**
[Example suggestion] Monday 31/ 01/ 2022		
Tuesday 01/02/2022		
Wednesday 02/02/2022		
Thursday 03/02/2022		
Friday 04/02/2022		
Monday 07/02/2022		
Tuesday 08/02/2022		
Wednesday 09/02/2022		
Thursday 10/02/2022		
Friday 11/02/2022		
…etc		

Date *(DD/MM/YYYY)*	**Girls attending**	**Boys attending**

Date *(DD/MM/YYYY)*	**Girls attending**	**Boys attending**

Observation Checklist

Instructions: Use this observation form and place a tick in the check box in the response column to indicate if the item is present otherwise allow it blank

Sn	Question	Means of Verification	Response
1	Availability of 2 focal person for menstrual hygiene management in the school	• Two teachers have attended MHM training and report available **OR** • Availability of teachers on the day of visit	☐
2	Step down training for other staff on menstrual hygiene management in this school?	• Training manual available and step down training report • Attendance sheet of training	☐
3	Availability of a safe space for menstrual hygiene management	• Safe available in good state. • Meets all construction requirements (private toilets, running water etc) • Have some dignity kits for the girls.	☐
4	Availability of disposal facility exist for menstrual hygiene management for girls	• Disposal facility constructed according to standard.	☐
5	Availability of a storage space with spare dignity kits	• Water available on day of visit	☐
6	Availability of "dignity kits" for girls in school keep in a cupboard containing the following: ***Check if the kit contains the following items as listed below**:* a. Washable sanitary towel b. Toilet soap c. Underwear d. Comb e. Detergent f. Disposable sanitary towels g. Toothbrush and toothpaste h. Local production of washable menstrual towels	• Data collector checks to see the available stock in the safe space	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
7	Local production of washable menstrual towels	• Available and done according to standard	☐
8	Existence of a club for MHM in schools	• Register for club activities • Training materials for the clubs • Communication materials on MHM	☐
9	Any on-going sensitization activities about menstrual hygiene management in this school?	• Report on sensitization on MHM	☐
10	Any on-going sensitization about menstrual hygiene management in the community? For example community health workers in the	• Report on sensitization on MHM in the Community	☐

	community telling women what to do.		

Child Assent Form

Title of Project: **Increasing Adolescent Girls' School Attendance in Education in some Priority Regions of Cameroon through Menstrual Hygiene Management.**

In order for minors (younger than 18 years of age) to participate in this research study, parental or guardian permission must be obtained.

	Affiliation, address and phone number
Advisory Panel	
Jonah Bury	**NatCen**
Janet Hatcher Roberts	**WHO-CC**
Molly Scott	**NatCen**
Daniel Philips	**NatCen**
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Purpose of the study: This project is a pilot study to assess the acceptability, feasibility and evidence of promise of a Menstrual Hygiene Management (MHM) intervention in improving school attendance rates amongst adolescent girls, in some priority education areas of Cameroon. This involves setting up safe spaces for MHM in schools where girls can access MHM materials and educational materials, training teachers as MHM leaders, and community engagement. Teachers will also be empowered to handle menstruation issues in schools.

Funding: This project has been commissioned by **eBASE Africa** with support from **Education Endowment Foundation UK**. The project is implemented by **UNWOMEN Cameroon** and evaluated by a consortium of 2 organisation: **ASSOWIP and CDBPH.** There is an Advisory Panel made up of NatCen and WHO-CC that provide overall technical support to the evaluation team.

Participation: You are one of 270 girls' ages 10-20 years old that we have randomly selected from 15 schools in the East, Far North, and North West regions of Cameroon. We will interview you to collect information on your family, your knowledge of menstruation and menstrual hygiene practices. The interview should last between 10 to maximum of 25mins and you may be randomly selected to participate in the midline and/or end line study as well.

Risk: During your participation in this project, you may discuss some personal challenges and experiences with MHM in school, house and community. Some topics and questions may cause discomfort and stress anxiety. We provide you assurance that every effort will be made to minimize these risks by attempting to establish a respectful and comfortable environment for all during the research project. We also remind you that your responses are voluntary and you may choose to end the interview or skip a question at any time.

In terms of risks from the current COVID-19 pandemic, we have taken all government mandated precautions for the prevention of COVID-19 infection like regular hand sanitization, wearing of masks and frequent disinfection of surfaces. We strictly follow social distancing rules and prefer to conduct this interview in an open/well ventilated and uncrowded space where you are comfortable and where school administrators could visibly see you but will not hear your responses.

Benefits: You will not directly benefit from participating in this study. However, we hope that your contribution will support efforts to improve menstrual hygiene management services for girls like you.

Compensation/Cost: Neither will there be a cost incurred for you to participate in this study nor any payment for participation.
Confidentiality: The responses you provide will be treated with the highest degree of confidentiality. In order to guarantee anonymity, your name and any other information, which may be directly linked to you, will not be required for this exercise. The responses you provide in the questionnaire will be treated with integrity according to the data protection policy of ASOWWIP.
Conservation of data: The data that will be collected (both hard copies and electronic) for example, consent form will be kept in a secure manner. Electronic data will be stored with secured access on a server. A backup copy of the data will be encrypted and stored on two password protected external hard drives which will be accessible only to the project leads. Data will be destroyed after 10years by the project leads.
The data created in this study – which combines your data with many others – can be useful for additional analysis. This de-identified data may be shared with other researchers for additional analysis.
Voluntary participation: Participation in this survey is entirely voluntary, which means that you decide whether or not to participate. You are also free to refuse to answer or skip a question at any point. If for any reason at any time, you would rather not participate, you are free to withdraw. If you decide to withdraw, there will be no penalty or adverse consequences for you or your decision.
Voluntary photo or video image: You are under no obligation to agree to have your image published in any of the project activities. If you decide not to have your image published, it will not have any effect to your care and If you choose to withdraw your consent for video or photo image at any point in time, there will be no penalty or adverse consequences for you or your decision.
If you have any questions now or in the future about your participation in the study, please contact **Nji Valery; Tel: +237 6 77 32 58 09**. If you have any concerns or complaints, or if you have any questions regarding your rights as a research subject, please **Okwen Patrick Tel: +237 6 77 31 93 74.**

Acceptance: I---------- agree to participate in the above research project conducted by ASSOWIP, CDBPH and NATCEN. By my signature below/or verbal agreement, I agree to comply with all the research activities as outlined above.

For oral acceptance-participant will repeat acceptance statement after the interviewer
Signature
Participant ---------- Witness----------
Date ---------- Time----------

For written acceptance
Signature
Participant ----------Witness .....
Date---------- Time.....
Project leads----------Time----------Date
Optional Image Release
I, ----------, give the project leads permission to use my photographs in which I appear for any of the project related publications and presentation where relevant.
Signature---------- Date----------

*****Before any data collection occurs the approved English and French form will be translated and adjusted to the "tone" of Pidgin English and "Fufulbe" (the local language in this region of Cameroon).**

In-depth interview guide for girls (primary, secondary and high school students)

Introduction

Introduction to researcher.

Thank you for agreeing to take part in this interview

Introduction to Association for the Welfare of Women and Indigenous People (ASOWWIP) – independent research organisation, commissioned by Effective Basic Services to carry out this pilot evaluation study

Explanation of research:

- Interviews will explore issues around children's health and well being, focusing on the health of young girls and menstruation.
- The findings will be used to improve the educational achievements of girls who have difficulty taking part in school life when they are menstruating.

About the Interview

- Participation is voluntary - there are no right or wrong answers, you can choose not to discuss any issue
- What you say is confidential and your participation is anonymous.
- We will write a report of our findings but no names or personal details will be included
- You will not be identifiable to anyone else in the report

We will be recording the interview so we have an accurate record of what is said

- Recorder is encrypted and files stored securely on ASOWWIP's computer system in line with ASOWWIPs data protection regulation.
- Only the research team will have access to the recordings
- Data will be deleted at the end of the project

The interview will last 45 minutes/Questions/Ask for permission to start recording

NB. This will be a sensitive and personal topic for all participants so interviewers must approach this sensitively. To make this easier it may be necessary to use an icebreaker to gain trust and reassurance. Examples include:

- What is your favourite Cameroonian dish?
- When you are less busy, what would you prefer to do to pass the time?

Demographic Information of interviewee

Tell me a bit about yourself, for instance your name, how old are you, what class you are in and religion.

I- Acceptability of the GHM project

- Previous MHM practices outside the school (stories)

  (who, what, how, why, when, then)

- MHM practices in the school during the project (stories)
  - use or not of the materials and facilities (who, what, how, why, when)
  - personal and community attitude towards the idea of MMH at school
  - personal and community attitude towards the MMH system in place
- Personal involvement in school-based MHM (dispositions and actions)
- Desired changes for MHM in the school (arguments)
- Positive aspects to be strengthened for the MHM in the school (arguments)

II- Feasibility of the project

1- Availability of resources

- **Material resources**
  - Existence of an assigned space equipped for the MHM (//)
    - Location/ accessibility (personal and collective opinions)
    - Configuration/fitting/convenience/comfort (personal and collective opinions)
    - Hygiene of materials and dignity spaces (opinions and illustrations)
    - Perceptions (MHM resources)
  - **Dignity Kits**
    - Availability/shortage (perceptions)
    - Typology (personal and collective description and perceptions)
    - Quality (perceptions)
    - Procedure and access routes (accounts of direct or indirect experiences, opinions)
    - Perceptions (of types of products, mechanism for obtaining them)
    - Suggestions for improvement
- **Human resources**
  - Actors and their activities in the MHM
    - Typology of actors and their activities (descriptions and opinions)
    - Interactions (accounts of direct or indirect experiences and opinions)
    - conflicts
- **Psychosocial support**
  - Typology of actions (narratives, descriptions and perceptions)
  - Frequency
  - Effects (attitudes and behaviour of girls and others)
  - Need for other supports
  - Perceptions of different types of support (what, how, why?)
  - Suggestions

2- The existence of similar projects in the past or present

- Typology
- Description (what, when, who, where)
- Perceptions

III- Effectiveness of the intervention

III.1 Attendance in relation to the rules

- Past (narrative)
- Present (narrative)

III.2 Perception of the relevance of the intervention

- Opinion on extending the intervention to other sites

VI. Continuation and extension of the MHM project

- Views on the continuation of the MHM project (what, factors to consider)
- Views on extending the project (what, factors to consider)

Conclusion:

- Additional remarks on the subject
- Acknowledgement and contact

In-depth interview guide for administrative managers in the education sector (RDMINEDUB, RDMINESEC) /District Medical Officer / Teacher / Head of school / PTA / Sanitation department / councils

Introduction

Introduction to researcher

Thank you for agreeing to take part in this interview

Introduction to Association for the Welfare of Women and Indigenous People (ASOWWIP) – independent research organisation, commissioned by Effective Basic Services to carry out this pilot evaluation study

Explanation of research:

- Interviews will explore issues around children's health and well being, focusing on the health of young girls and menstruation.
- The findings will be used to improve the educational achievements of girls who have difficulty taking part in school life when they are menstruating.

About the Interview

- Participation is voluntary - there are no right or wrong answers, you can choose not to discuss any issue
- What you say is confidential and your participation is anonymous.
- We will write a report of our findings but no names or personal details will be included
- You will not be identifiable to anyone else in the report

We will be recording the interview so we have an accurate record of what is said

- Recorder is encrypted and files stored securely on ASOWWIP's computer system in line with ASOWWIPs data protection regulation.
- Only the research team will have access to the recordings
- Data will be deleted at the end of the project

The interview will last 45 minutes/Questions/Ask for permission to start recording

NB. This will be a sensitive and personal topic for all participants so interviewers must approach this sensitively. To make this easier it may be necessary to use an icebreaker to gain trust and reassurance. Examples include:

- What is your favourite Cameroonian dish?
- When you are less busy, what would you prefer to do to pass the time?

Demographic Information of interviewee
Tell me a bit about yourself, for instance your name, how old are you, what is your position in your institution, years of experience and religion.

<u>Perception of menstrual hygiene management</u>

- What are girls' perceptions of menstrual cycle management?
- Products used to stay clean (name the products)
- What are the mechanisms for obtaining these products?
- What are the cultural practices that may affect the way girls manage their menstrual cycle (belief, taboo, restriction on what products you can and cannot use, what they can do, where they can go)?

<u>Information and counsel</u>

- What information/counsel for managing bleeding during menstruation is made available to the adolescent by the MHM pilot?
- What are the types of support are available for adolescents going through their menstrual cycle?

<u>Relevance and effectiveness</u>

- Perceived relevance of the intervention
- Perceived effectiveness of the intervention

Acceptability of the project

- What are the perceptions on the acceptability of the project?
- What are the cultural elements, values and beliefs that may constitute obstacles to the implementation of the project?
- What are the perceptions on the conditions of implementation of the project?

Feasibility of the project

- Perceived availability of resources to implement the intervention
- Perceived conformity of the intervention with existing norms or legislation
- Motivations of beneficiaries to join the project
- Existence of administrative mechanisms to facilitate the intervention
- Existence of another ongoing project on menstrual hygiene (Organisation, partner, type of intervention)
- Project promoters
- Actors implementing this project

Impact on schooling/environment/health

- What is the impact of menstruation on adolescents' education?
- What are the perceptions on the importance of community awareness on menstrual hygiene management in schools?
- What are the perceptions of menstrual hygiene management on adolescent school attendance?
- What is the impact of the project on environmental sanitation in schools and in the city?
- What is the impact of the project in improving the sexual health of young girls?
- What are the perceived unintended side effects of this intervention?

Sustainability of the intervention

- What are the possibilities of extending the intervention to other regions?
- What are the factors to be considered in extending the project to other localities?

Suggestions for improvement

- What are the suggestions for improving menstrual hygiene management for girls in school?
- What ideas would make menstrual hygiene management in schools more sustainable?

Conclusion

- What are the general views on how best to help girls in school during their menstrual period?

Interview guide on MHM for community members

Introduction

Introduction to researcher.

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- Interviews will explore issues around children's health and well being, focusing on the health of young girls and menstruation.
- The findings will be used to improve the educational achievements of girls who have difficulty taking part in school life when they are menstruating.

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- What is your favourite Cameroonian dish?
- When you are less busy, what would you prefer to do to pass the time?

Demographic Information of interviewee
Tell me a bit about yourself, for instance your name, how old are you, your level of education and religion.

I. Acceptability of the MHM project

- MHM practices in the community (stories)
  (who, what, how, why, when, then)
- Personal and community postures (absent third party and rumours) towards the idea of MHM in school (past and present)
- Desired changes for MHM in school (arguments)
- Positive aspects to be consolidated for MHM in school (arguments)

II. Feasibility

II.1-Psychosocial support

- Knowledge of the existence of the project (who, what, how and when)
- Awareness creation (who, what, how, and then)
- Effects (attitudes and behaviour of girls and others)
- Suggestions

III. Effects of the awareness creation/ GHM project

- Perception of menstrual hygiene management on school attendance of adolescent girls
- Personal involvement in MHM at school (provisions and actions)

IV. Continuation and extension of the GHM project

- Views on the continuation of the MHM project (what, factors to consider)
- Views on extending the project (what, factors to consider)

Conclusion:

- Additional remarks on the subject
- Acknowledgement and contact

Key Informant Interview Guide for Key Project Staff

Project: Menstrual Hygiene Management (MHM) pilot in some selected Schools in the North West, East and Far North Regions of Cameroon

Organization: ASOWWIP/CDBP-H

Introduction

Introduction to researcher.

Thank you for agreeing to take part in this interview

Introduction to Association for the Welfare of Women and Indigenous People (ASOWWIP) – independent research organisation, commissioned by Effective Basic Services to carry out this pilot evaluation study

Explanation of research:

- Interviews will explore issues around children's health and well being, focusing on the health of young girls and menstruation.
- The findings will be used to improve the educational achievements of girls who have difficulty taking part in school life when they are menstruating.

About the Interview

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- What you say is confidential and your participation is anonymous.
- We will write a report of our findings but no names or personal details will be included
- You will not be identifiable to anyone else in the report

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- Recorder is encrypted and files stored securely on ASOWWIP's computer system in line with ASOWWIPs data protection regulation.
- Only the research team will have access to the recordings
- Data will be deleted at the end of the project

The interview will last 45 minutes/Questions/Ask for permission to start recording

NB. This will be a sensitive and personal topic for all participants so interviewers must approach this sensitively. To make this easier it may be necessary to use an icebreaker to gain trust and reassurance. Examples include:

- What is your favourite Cameroonian dish?
- When you are less busy, what would you prefer to do to pass the time?

Demographic Information of interviewee

Tell me a bit about yourself, for instance your name, how old are you, what is your position in your institution, years of experience and religion.

Acceptability of the intervention

Knowledge on Menstruation

1. What menstruation is, whom it affects, how frequently it happens.

How it affects adolescent school girls

1. In your opinion does the menstrual hygiene management intervention influence menstrual hygiene management practices among adolescent school girls?
2. In your opinion how does the intervention influence understanding and support for menstruating school girls in the community?
3. In what ways does the intervention influence adolescent girls' school attendance in beneficiary schools?

Unintended consequences of the intervention

1. In your opinion has there been any unintended consequences or negative consequences associated with the intervention?

Demand for the intervention

1. Can you explain why you feel there is a need for this intervention?
2. In what ways have conflict impacted the acceptability of the intervention?

Feasibility

Demand for the intervention

1. Has there been sufficient demand from schools for the pilot? What is the likely demand/appetite for a full trial?
2. According to you, is this intervention feasible to deliver in schools (e.g. in terms of staffing, facilities, timetabling)? Would adjustments be needed for a full trial?
3. Can you explain if the intervention reached its intended student target group? Would adjustments be needed for a full trial?

Implementation of the intervention as intended

1. In your opinion, has the intervention been implemented as intended?
2. Were the safe spaces built to a uniform standard across the schools? Were these spaces well maintained throughout the pilot period? Would there be need for any support?
3. Has the staff training been effective in preparing staff to deliver the intervention? How effective was the training of trainers at regional levels? How effective was the training in schools? Would adjustments be needed for a full trial?

Provision of support Materials to teachers

1. What **materials and support** have been provided to staff?
2. How effective have they been in supporting staff to deliver the intervention?

3. Have there been any issues with the quality and timeliness of support provided, given that programme staff are based in Yaoundé?
4. Would adjustments be needed for a full trial?
5. To what extent has the capacity and expertise of the partner organizations been built to run training and provide support should the intervention go to trial?

Provision of support Materials to teachers

1. What materials and support have been provided to the students?
2. How effective have they been in supporting the students in the intervention?
3. Have there been any issues with the quality and timeliness of support provided? Would adjustments be needed in a full trial?

Functionality of MHM Clubs

1. How effective were the MHM Clubs in schools?
2. How many students registered as members of the Clubs?
3. What did the MHM Clubs carry out the activities?
4. How often did the Clubs meet?
5. What is the perception about the MHM Clubs in the schools?

Engagement of school staff

1. Have school staff been fully engaged in the intervention?
2. Have there been any barriers to engagement (e.g. workload, time, expertise)? How, if at all, have these been overcome?
3. Have any types of staff been more engaged in the programme than others?

Engagement of school staff

1. Have students been fully engaged in the intervention?
2. Have there been any barriers to engagement (e.g. prior knowledge, support needs, stigma)? How, if at all, have these been overcome?

Suggestions for improvement

1. Any suggestions for improvement
2. Are there effects of the intervention on other programmes or events?

Informed Consent Form

Title of Project: **Increasing Adolescent Girls' School Attendance in Education in some Priority Regions of Cameroon through Menstrual Hygiene Management.**

	Affiliation, address and phone number
Advisory Panel	
Jonah Bury	**NatCen**
Janet Hatcher Roberts	**WHO-CC**
Molly Scott	**NatCen**
Daniel Philips	**NatCen**
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Purpose of the study: This project is a pilot study to assess the acceptability, feasibility and evidence of promise of a Menstrual Hygiene Management (MHM) intervention in improving school attendance rates of adolescent girls, in some priority education areas of Cameroon. This involves setting up safe spaces for MHM in schools where girls can access MHM materials and educational materials, training teachers as MHM leaders, and community engagement. Teachers will also be empowered to handle menstruation issues in schools.

Funding: This project has been commissioned by **eBASE Africa** with support from **Education Endowment Foundation UK**. The project is implemented by **UNWOMEN Cameroon** and evaluated by a consortium of 2 organisations: **ASSOWIP and CDBPH.** An Advisory Panel constituting a team from NATCEN and WHO-CC are providing technical support to the development of the study protocol and the overall evaluation process.

Participation: Your child is one of 270 girls' ages 10-20 years old that we have randomly selected from 15 schools in the East, Far North, and North West regions of Cameroon. We will interview her to collect information on her family, knowledge of menstruation and menstrual hygiene practices. The interview may last between 10 to maximum of 25mins and she may be randomly selected to participate in the midline and/or endline study as well.

Risk: During your child's participation in this project, she may discuss some personal challenges and experiences with MHM in school, house and community. Some topics and questions may cause discomfort, stress and anxiety. We provide you assurance that every effort will be made to minimize these risks by attempting to establish a respectful and comfortable environment for all during the research project. We also remind you that her responses are voluntary and she may choose to end the interview or skip to another question at any time.

In terms of risks from the current COVID-19 pandemic, we have taken all government mandated precautions for the prevention of Covid-19 infection like regular hand sanitization, wearing of masks, respecting safe distances and frequent disinfection of surfaces. We strictly follow social distancing rules and prefer to conduct this interview in an open/well ventilated and uncrowded space where you are comfortable. This area will have access to school authorities.

Benefits: Your child will not directly benefit from participating in this study. However, we hope that her contribution will support efforts to improve menstrual hygiene management services for girls like her.

Compensation/Cost: Neither will there be any cost incurred for your child to participate in this study nor any payment for participation.

Confidentiality: The responses she provides will be treated with the highest degree of confidentiality. In order to guarantee anonymity, her name and any other information which may be directly linked to her will not be required for this exercise. The responses she provides in the questionnaire will be treated with integrity according to the data protection policy of ASSOWIP.

Conservation of data: The data that will be collected (both hard copies and electronic) for example, consent form will be kept in a secure manner. Electronic data will be stored with secured access on a server. A backup copy of the data will be encrypted and stored on two password protected external hard drives which will be accessible only by the project leads. Data will be destroyed after 10years by the project leads.

The data created in this study – which combines your child's data with many others – can be useful for additional analysis. This de-identified data may be shared with other researchers for additional analysis.

Voluntary participation: Participation in this survey is entirely voluntary, which means that you decide whether your child participates or not. Your child is also free to refuse to answer or skip a question at any point. If for any reason at any time, she would rather not participate, she is free to withdraw. If you decide to withdraw your child, there will be no penalty or adverse consequences for you or your child in school and in the community.

Voluntary photo or video image: You are under no obligation to agree to have your child image published in any of the project activities. If you decide not to have her image published, it will not have any effect to her care and If you choose to withdraw your consent for video or photo image at any point in time, there will be no penalty or adverse consequences for you or your child.

PARENT'S CONSENT:

By signing below, you are giving consent for your child to participate in the above study. Please check the option that applies to you before signing.

☐ I give permission for my child to be audio/video taped or photographed.

☐ I give permission for my child to participate in the survey.

☐ I give permission for my child to be audio/video taped or photographed.

I do not give permission for my child to be audio/videotaped or photographed.

If you have any questions now or in the future about your participation in the study, please contact **NJI Valery CHE on; Tel: +237 6 77 32 58 09**.

There are two copies of the consent form, one of which is mine to keep.

For oral acceptance-participant will repeat acceptance statement after the interviewer

Your child's name: _____

Parent's name: _____

Parent's Signature: _____

Date:_____

*****Before any data collection occurs the approved English and French form will be translated and adjusted to the "tone" of Pidgin English and "Fufulbe" (the local language in this region of Cameroon).**

This document is available for download at https://educationendowmentfoundation.org.uk

Education Endowment Foundation

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