

Innovation in school-based MHM programming: How do we know what works?

October 2, 2019





Save the Dates!

November 12 (8:00AM EST):

Integrating MHM with Gender Transformative Programming: Experiences from Kyrgyzstan and Mexico

December 4 (8:00AM EST):

Striving for quality: What are standards and why are they important for menstrual health programming?

AGENDA

Presentations:

The NIA Project: Design, Implementation & Baseline findings

- Tatu Mkaja, ZanaAfrica
- Beth Kangwana, Population Council

Menstrual health interventions and School attendance among Ugandans (MENISCUS-2)

- Dr. Catherine Kansiime

Q&A



THE NIA PROJECT: DESIGN, IMPLEMENTATION & BASELINE FINDINGS

Presenters:

Tatu Mjaka, ZanaAfrica

Beth Kangwana, Population
Council

Study researchers:

Karen Austrian, PhD

Beth Kangwana, PhD

Erica Soler-Hampejsek, PhD



The **Nia Project** is the **first** study in Sub-Saharan Africa to **rigorously measure** the independent and combined effects of disposable **sanitary pads** and **SRHR education** on **girls' education and well-being.**

PARTNERS OF THE NIA PROJECT



Changing
emotions
and social
dynamics

Changin
g biology

Expectation
to marry

Limited
access to
menstrual
products

Girls' lack of
knowledge of
their bodies
and their
rights

Puberty is a highly vulnerable time for girls

Predation
from boys and
older men

Limited
evidence
base; no
rigorous
studies or
proven
solutions

Lack of accurate,
standardized,
relevant and
engaging
tools for
comprehensive
sexuality
education

Girls lack answers to their pressing questions

**Out of nearly 1,000 anonymous questions,
90%+ centered on:**

periods bodily changes relationships sex abuse

“What are safe days to have sex without getting pregnant?”

“When having my period am I expected to remain silent?”

“When I get periods for the first time what can I do?”

“If you have a boyfriend how will you know that he love and respect you?”

COMPONENTS



INTERVENTION

Term	Nia Teen Magazine Themes	Module #	Module Name	FHE Topics
Term 2, 2017	Friendship	1	Welcome to Puberty	<ul style="list-style-type: none"> • Getting started, Values • Setting Goals • Adolescence & Puberty • Menstruation • Menstrual Health Management
Term 3, 2017	Journey	2	Gender	<ul style="list-style-type: none"> • Male & Female Reproductive systems • Self Esteem • Communication • Introduction to Gender • Gender Stereotypes
Term 1, 2018	Pressure, Relationships, and Power Dynamics	3	Gender, Power and Rights	<ul style="list-style-type: none"> • Human Rights • Power Dynamics • Sexual Violence and Exploitation • How to Report and Avoid Cases of Sexual Violence • Being Assertive • Decision Making

INTERVENTION

Term	Nia Teen Magazine Themes	Module #	Module Name	FHE Topics
Term 2, 2018	Self Care, Sexual Behavior and Decision-Making	4	Healthy Relationships, Healthy Decisions	<ul style="list-style-type: none"> • Healthy Relationships • Romantic Relationships • Sexuality and Behavior • Teenage Pregnancy • Sexually Transmitted Infections (STIs) • And HIV
Term 3, 2018	Planning For your Future	5	Being True to Yourself	<ul style="list-style-type: none"> • Resisting Peer Pressure • Drug use and Abuse • Managing Stress, Anger and Conflict • Program Wrap Up

- Over five school terms (1.5 years):
 - 3072 Nia Club sessions held
 - 54,476 sanitary pad packets (10 packs) distributed
 - 105 sensitization meetings held with community stakeholders

IMPLEMENTATION

Population Council

- Carry out research components of project pertaining to RCT

ZanaAfrica

- Develop program interventions + protocols
- Develop program monitoring tools
- Oversee implementation and monitoring of programs with Plan International

Plan International

- Directly implement field-based RHE component
- Ensure effective program implementation
- Ensure effective sensitization prior to launch

INNOVATIVE ELEMENTS

- Codification of knowledge and experience of working with adolescents for 10+ years
- Co-development of materials – participatory process
- CSE content delivered in an inclusive way through storytelling, activities and comics, through the lens of adolescent girls
- Implementation through partnership, drawing on each other's strengths

RESEARCH QUESTIONS

- What is the effect of sanitary pad distribution and reproductive health education on girls health, well-being and education – each on their own and combined?

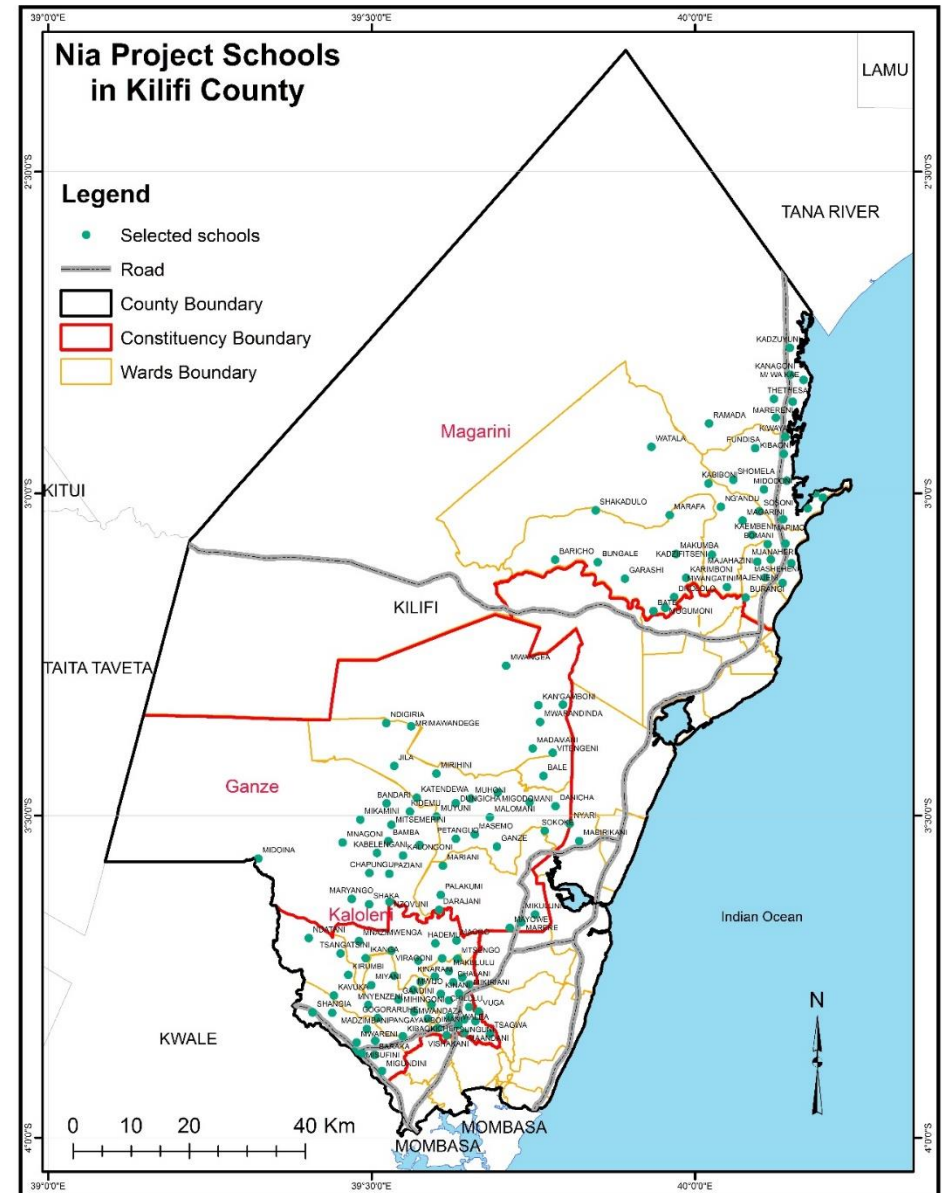
STUDY DESIGN

- Cluster-randomized controlled trial
- 140 schools in three sub-counties in Kilifi County

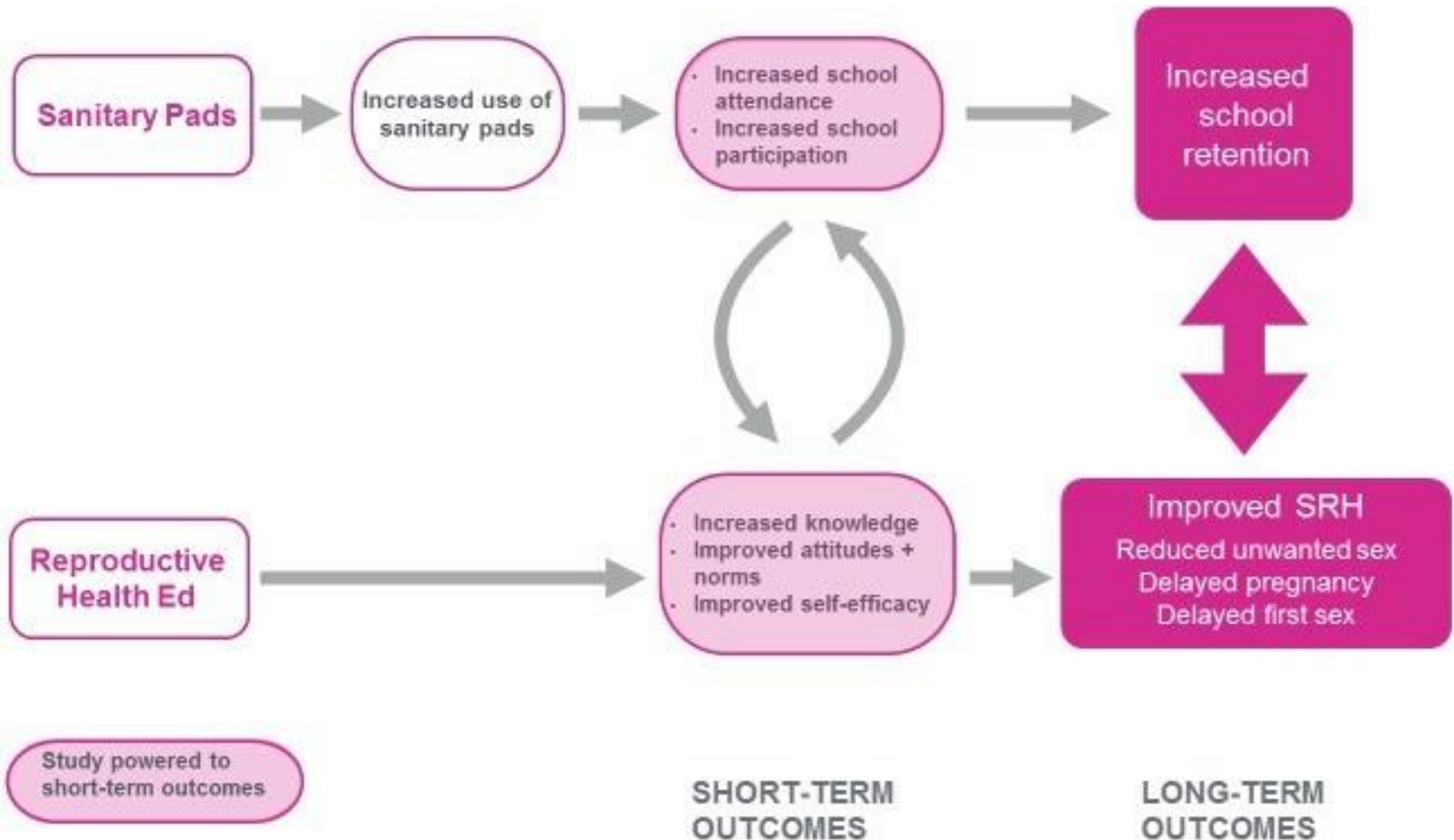
Arm 1 35 schools	Arm 2 35 schools	Arm 3 35 schools	Arm 4 35 schools
Control (No intervention)	Sanitary Pads	Reproductive Health Ed	Sanitary Pads Reproductive Health Ed

SCHOOLS BY SUB-COUNTY

- Magarini = 44
- Kaloleni = 50
- Ganze = 46



THEORY OF CHANGE



TIMELINE

MAY 2017	Baseline survey completed
JUN 2017	Start of intervention
JUN 2018	Qualitative study
OCT 2018	End of intervention
DEC 2018	Endline survey completed
APR 2019	Follow up survey completed
SEP 2019	Preliminary Findings Dissemination

BASELINE SURVEY

- Baseline survey conducted between January and April, 2017 in the three sub-counties
- Target group: girls in Class 7
- Girls survey with 3,489 girls conducted using tablets
- School quality survey to collect information on school characteristics

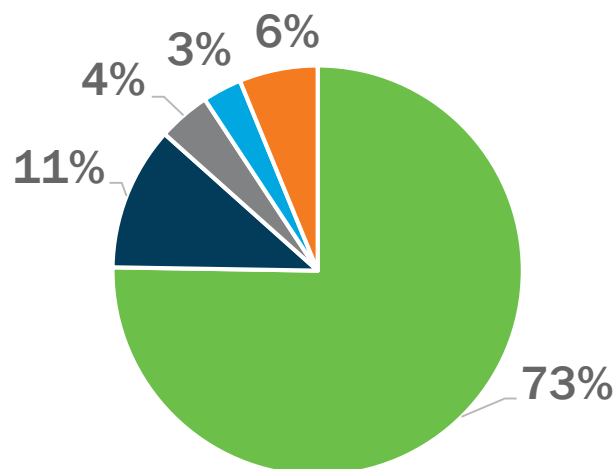
KEY FINDINGS: Schooling

- High educational aspirations despite anticipated challenges
- Substantial parental approval for education despite low levels of parental education
- Wide range of school quality



KEY FINDINGS: School Attendance

Reasons for Missing School



- Illness
- Lack of School Fees
- Bereavement

- About 41% of girls reported missing school during the previous term
- Percent missing for each reason:
 - Illness: 73%
 - Lack of fees: 11%
 - Menstruation: 3%

KEY FINDINGS: Menstruation & Reproductive Health

- Around 20% of girls reported having enough pads to manage their menses comfortably
- Girls shared feelings of shame and discomfort regarding their period and insufficient levels of self-efficacy
- About 10% were sexually-experienced, and half of those reported their first sex as unwanted

CONCLUSIONS FROM BASELINE

- Findings describe a cohort of school-going adolescent girls, with high educational aspirations, but a gap in their competencies to aid in completion of educational goals
- The Nia Project has the potential to bridge that gap, providing rigorous evidence to guide education and health policy in this area in Kenya and in the region

ACKNOWLEDGEMENTS

- Kilifi County Department of Education
- Kilifi County Teachers Service Commission
- Kilifi County Department of Health
- Kilifi County Department of Gender, Culture, Social Services and Sports
- Ministry of Interior and Coordination of the National Government
 - County Commissioner and Assistant County Commissioners
 - Chiefs and Assistant Chiefs
- Parents, Girls, Community Members

Q&A



Study website:

<https://www.popcouncil.org/research/evaluating-the-nia-project>

Contact:

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ADDITIONAL SLIDES



**ZanaAfrica equips girls and women
with the tools they need to thrive**

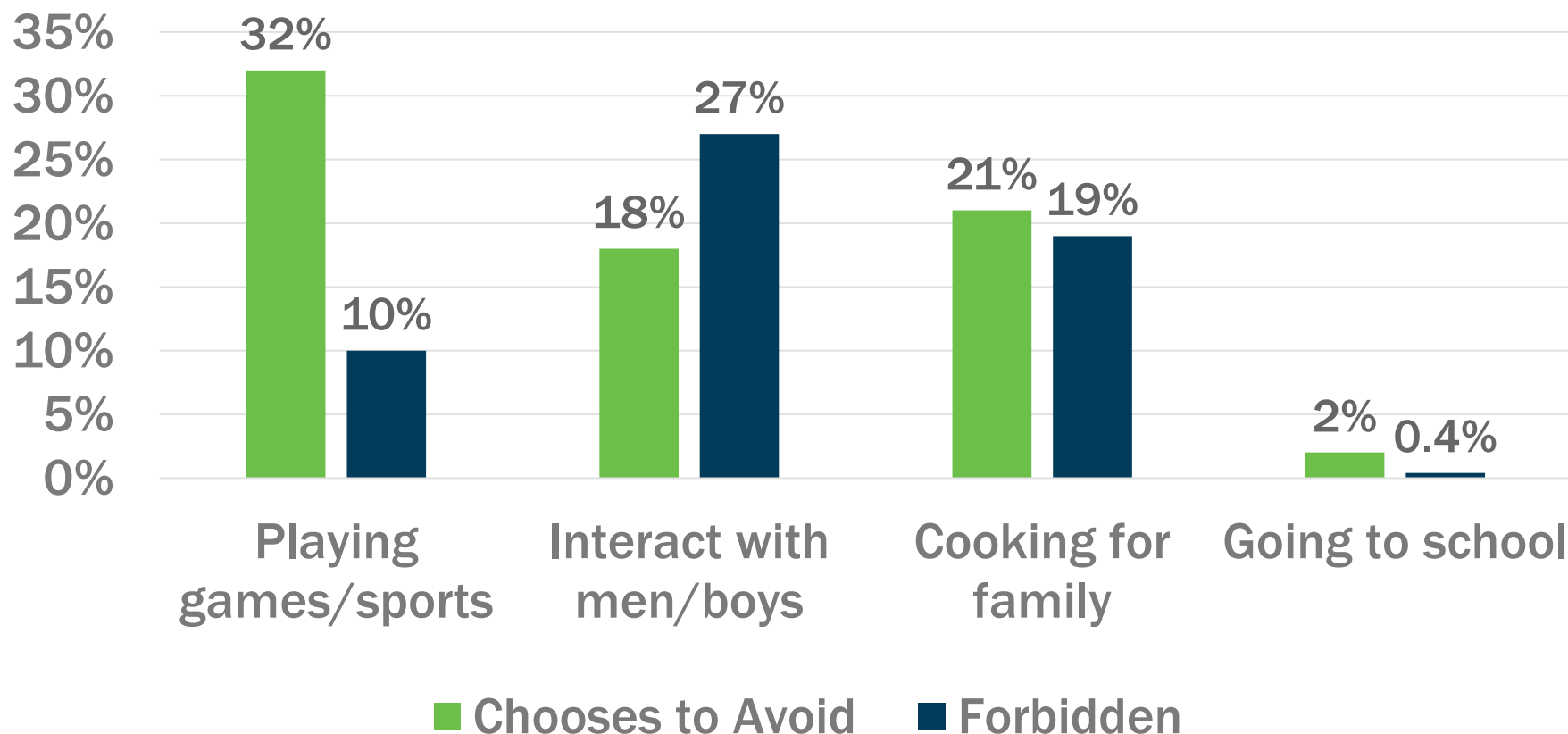


The
Population Council
conducts biomedical,
social science, and public
health research. We
deliver solutions that lead
to more effective policies,
programs, and
technologies that improve
lives around the world.

REVIEW OF LITERATURE

- No rigorous studies examining combined interventions – very little on pads alone
- Lack of studies comprehensively examining impact on both educational and reproductive health outcomes

ACTIVITIES AVOIDED DURING MENSTRUATION





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& TROPICAL
MEDICINE



MENISCUS-2 study

Menstrual health interventions and **School** attendance among **Ugandans**

Webinar Presentation

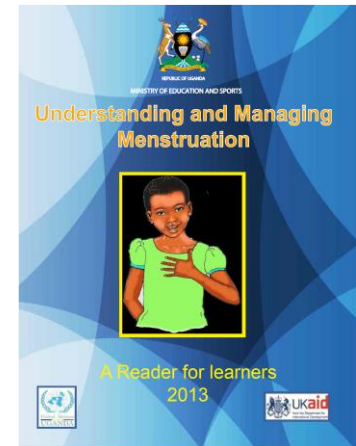
2nd October, 2019

Dr. Catherine Kansiime

Study Coordinator

MHM in Uganda

- MHM is being prioritized by the Government
- The Ministry of Education and Sports (MoES) is promoting MHM
 - Supporting policies and activities by MoES:
 - The Menstrual Hygiene Management Charter (2015)
 - Uganda National Menstrual Hygiene Management Training Manual (draft)
 - The Gender Unit (MoES) has conducted district MHM training sessions in several regions targeting learners & teachers.
 - "Understanding and Managing Menstruation - A Reader for Learners" (2013)
 - MHM circular on MHM in schools (2015)
 - Well promoted & attended MHM day (28th May)



Overview of MENISCUS-1 study

Aim: To investigate menstruation management practices, barriers and facilitators, and the influence of menstruation on school absenteeism among students in Entebbe

Study population: Four secondary schools in Entebbe sub-district among 352 girls in S2 and S3 (aged 14-17) from February 2015 to July 2016

Key findings from Qualitative study

- Interviews identified poverty and menstruation as barriers to school attendance

Among girls:

- 35% had ever stained their outerwear
- 20% reported missing school in the last month because of their period
- 77% reported stomach pain during periods
- Psychosocial barriers and stigma leading to school absenteeism was highlighted
- WASH facilities in schools were poor

MENISCUS-2 study

Aim: To review whether criteria for progression to a school-randomised controlled trial are met, by piloting the MENISCUS-2 intervention in 2 schools in Entebbe sub-district Uganda

Objectives:

- To finalise and pilot the intervention package and conduct a process evaluation of the fidelity, sustainability and acceptability of intervention
- To finalise and assess outcome tools for the future trial
- To estimate the retention rate and effect size of the intervention on school absenteeism in 2 intervention schools (MENISCUS-2)

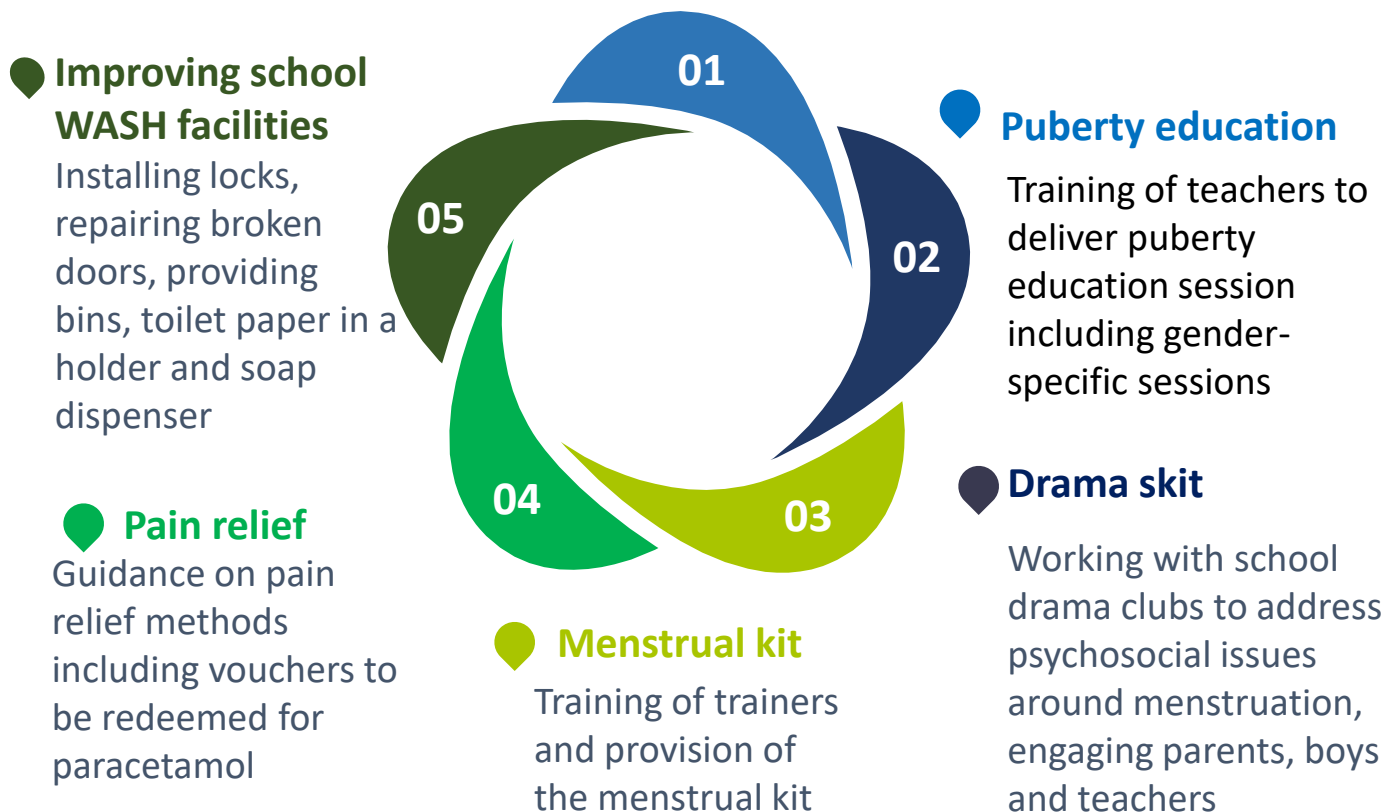
MENISCUS-2 study population

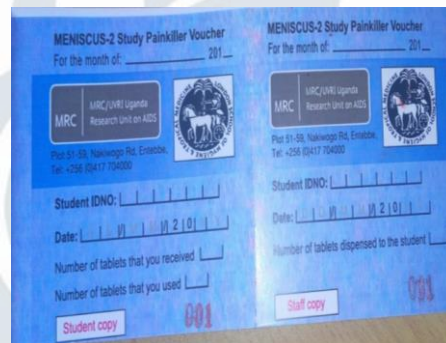
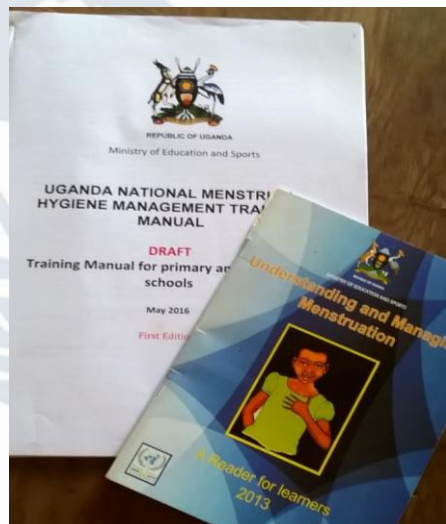
- 450 Form 2 students (age 12-21 years) enrolled at baseline (October 2017) from two secondary schools in Entebbe Sub-district
- Of these, 369 students (82%) at end-line (August 2018)

Private school (94)	Government school (275)
52 females	136 females
42 males	139 males
Age 14-19 years	Age 13-21 years



MENISCUS-2 intervention package





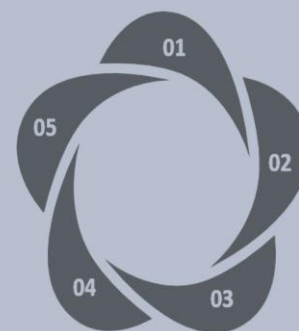
● Bins
To provide bins for sanitary disposal

● Toilet paper dispensers
To provide toilet paper dispenser fixed to the wall

● Soap
To provide Liquid hand washing soap for mixing in the drum with water.

● Functioning doors and locks
To work with the school to replace and fix broken doors and fit locks on toilet doors

● Water drums
To provide water drums to be filled with clean and soapy water for each toilet area



Study methods

81/100 girls from both schools completed filling daily diaries to assess school attendance and menstrual patterns over 9 months

Baseline (232) and end-line (188) Questionnaires (October 2017-August 2018)

- Knowledge and attitudes towards menstruation
- Uptake & acceptability of the re-usable pad, paracetamol and WASH
- Subjective wellbeing (Strengths & Difficulties Questionnaire)

Day	Date	Did you go to school today? [SCHTODAY]				Did you attend class today? [CTODAY]			Are you in your period today? [PTODAY]			Do you have period pain today? [PPTODAY]		Did you take any painkiller tablets today? [PTABS]		
		Full Day	Half Day	No	Holiday	Yes	Some	None	No	Light period	Moderate period	Heavy period	No	Yes	No	Yes
Mon	04 Jun 18															
Tue	05 Jun 18															
Wed	06 Jun 18															
Thu	07 Jun 18															
Fri	08 Jun 18															
Sat	09 Jun 18															
Sun	10 Jun 18															

Footnotes:
Remember to tick one box per column on each day.
- Did you go to school today? Full day=Yes, for the whole day.
Half day = Yes for half a day, No = Did not attend school although: a) was open, Holiday = including public holidays and weekends when you do not study
- Did you attend class today? Yes = All classes, Some = some classes; None = No class attended
- Are you in your period today? No = I am not having my periods, Light period = light flow, Moderate period = average blood flow, Heavy period=heavy blood flow
- Do you have period pain today? Yes = your stomach or back aches due to period, No = your stomach or back not aching today due to period.



S2 students using ODK on tablets to complete baseline survey

Study methods

Qualitative interviews

- In-depth interviews (IDIs) with girls (20), teachers (10) and parents (10). Interviewers were same gender with respondents
- Participatory Group discussions (4) with female and male students

Direct observation: WASH facilities (9visits per school over 9months)



WASH observational visit by the project team

Knowledge of puberty and menstruation

	Girls			Boys		
	Baseline	Endline	OR ¹ (95% CI)	Baseline	Endline	OR ¹ (95% CI)
All 9 knowledge questions correct	27 (11.6%)	45 (23.9%)	4.03 (1.88-8.68)	9 (4.1%)	23 (12.7%)	4.11 (1.62-10.5)
Knowledge excluding fertility qn	70 (30.2%)	120 (63.8%)	7.02 (3.67-13.45)	42 (19.3%)	73 (40.3%)	4.16 (2.15-8.04)
All 4 myth questions correct	39 (16.8%)	77 (41.0%)	5.44 (2.82-10.50)	22 (10.1%)	44 (24.3%)	3.99 (2.00-8.04)
All 3 menstrual cycle questions correct	12 (5.2%)	55 (29.3%)	19.45 (5.88-64.5)	4 (1.8%)	14 (7.7%)	3.95 (1.26-12.4)

Summary: Substantial improvements in knowledge of puberty and menstruation but a minority answer all questions correctly

baseline Age <16 years				Age > 16 years		
	Baseline (n=115)	Endline (n=51)	AOR (95% CI)	Baseline (n=107)	Endline (n=132)	AOR (95% CI)
>8 of 9 positive perceptions of menstruation	14 (12.2%)	16 (31.4%)	5.25 (1.10-25.19)	13 (12.2%)	35 (26.5%)	2.98 (1.29-6.86)
Used manufactured menstrual materials only at LMP	86 (74.8%)	46 (90.2%)	3.40 (1.06-10.9)	76 (71.0%)	117 (88.6%)	4.24 (1.68-10.78)
Leaked blood at LMP	37 (50.0%)	12 (42.9%)	0.60 (0.18-2.04)	37 (45.1%)	24 (32.4%)	0.58 (0.28-1.18)
Underwear stained at LMP	31 (27.0%)	16 (31.4%)	1.14 (0.45-2.87)	21 (19.6%)	34 (25.8%)	1.49 (0.73-3.06)
Knew >4 effective pain management methods	30 (24.2%)	37 (67.3%)	10.80 (3.48-33.56)	30 (27.8%)	97 (72.9%)	21.62 (5.44-84.93)
Reported pain at last period	79 (68.7%)	36 (70.6%)	1.00 (0.37-2.65)	86 (80.4%)	94 (71.2%)	0.54 (0.26-1.10)

Reported leakage by type of school

	Government			Private		
	Baseline	Endline	OR or AMD (95% CI)	Baseline	Endline	OR or AMD (95% CI)
Leaked blood at LMP	50 (45.5%)	28 (35.4%)	OR=0.62 (0.27-1.40)	24 (52.2%)	8 (35.8%)	OR=0.26 (0.05-1.37)
Knickers stained at LMP	38 (24.7%)	43 (31.9%)	OR=1.70 (0.92-3.14)	14 (20.6%)	7 (14.6%)	OR=0.42 (0.09-1.91)
Outside clothes stained at LMP	15 (11.1%)	15 (9.7%)	OR=1.16 (0.50-2.71)	4 (5.9%)	3 (6.3%)	OR=0.99 (0.20-4.86)

Summary: Inconsistent reporting of leakage – need to improve question?

Drama skit performance

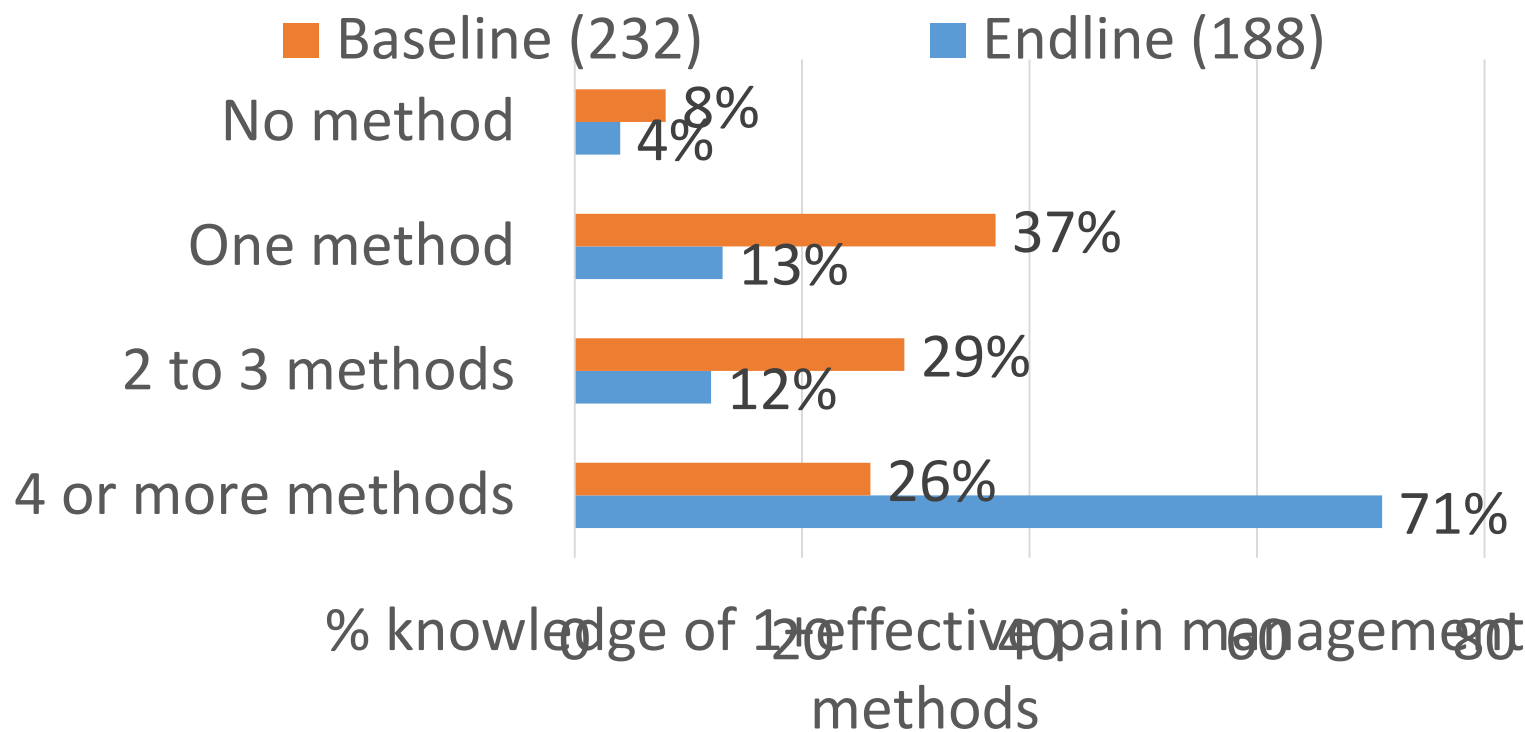
Girls' FGD: Parents especially single fathers got a lot of information from the drama skit regarding menstruation and how they can support their girls in its management. Girls and male teachers too acquired this information".

*Female Parent, 37 year old
"When we all saw the skit, it gave us a starting point to initiate a discussion with our children. Even men got it"*

Drama skit performed at both schools in Term 2, July 2018



Pain management methods during most recent period



Effective methods (painkiller, drinking water, using hot water bottle, exercise, relaxing, foods with lots of water). 92% of girls who had pain reported using an effective method at endline.

Reported menstrual pain and pain management

	Government			Private		
	Baseline	Endline	OR (95% CI)	Baseline	Endline	OR (95% CI)
Any pain at last period	113 (73.4%)	94 (69.6%)	0.62 (0.32-1.20)	52 (76.5%)	36 (75.0%)	1.02 (0.32-3.33)
Used ≥ 1 effective pain management method ¹	85 (75.2%)	87 (92.6%)	4.77 (1.57-14.5)	41 (78.9%)	32 (88.9%)	2.17 (0.60-7.77)
Did nothing for pain at LMP ¹	26 (23.0%)	6 (6.4%)	0.16 (0.04-0.61)	11 (21.2%)	3 (8.3%)	0.38 (0.10-1.55)
Used painkillers at LMP ¹	52 (46.0%)	55 (58.5%)	1.71 (0.86-3.39)	25 (48.1%)	24 (66.7%)	2.34 (0.75-7.31)
Used other effective methods ¹	56 (49.6%)	75 (79.8%)	6.52 (2.45-17.3)	26 (50.0%)	26 (72.2%)	2.65 (1.03-6.84)

¹ Among those with pain at LMP

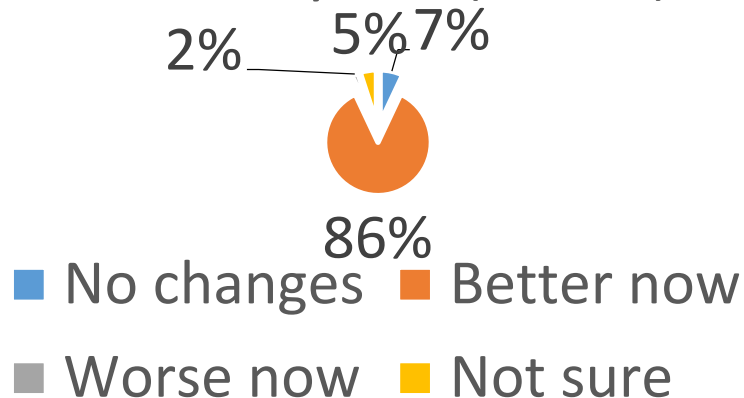
Summary: No change in proportion reporting pain, but substantial improvement in pain management at LMP

Presence of bins, toilet paper, water & soap at baseline and endline

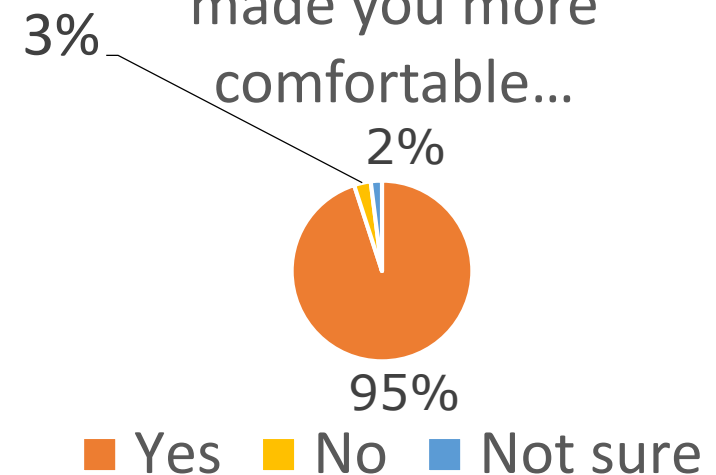
	Baseline	Follow-up: Visit 9			
	Boys & girls	Girls		Boys	
	Both schools	School 1	School 2	School 1	School 2
Blocks					
... with bins	x	✓	✓	N/A	N/A
... with toilet paper	x	x	x	x	x
...functioning water drum	x	✓	✓	✓	✓
...functioning water & soap drum	x	✓	x	x	x

Reported impact of WASH intervention

What changes have there been in the toilet facilities in this school year compared with the last school year? (N=183)



If better now - have these improvements made you more comfortable...



Outcome: School and class attendance in girls

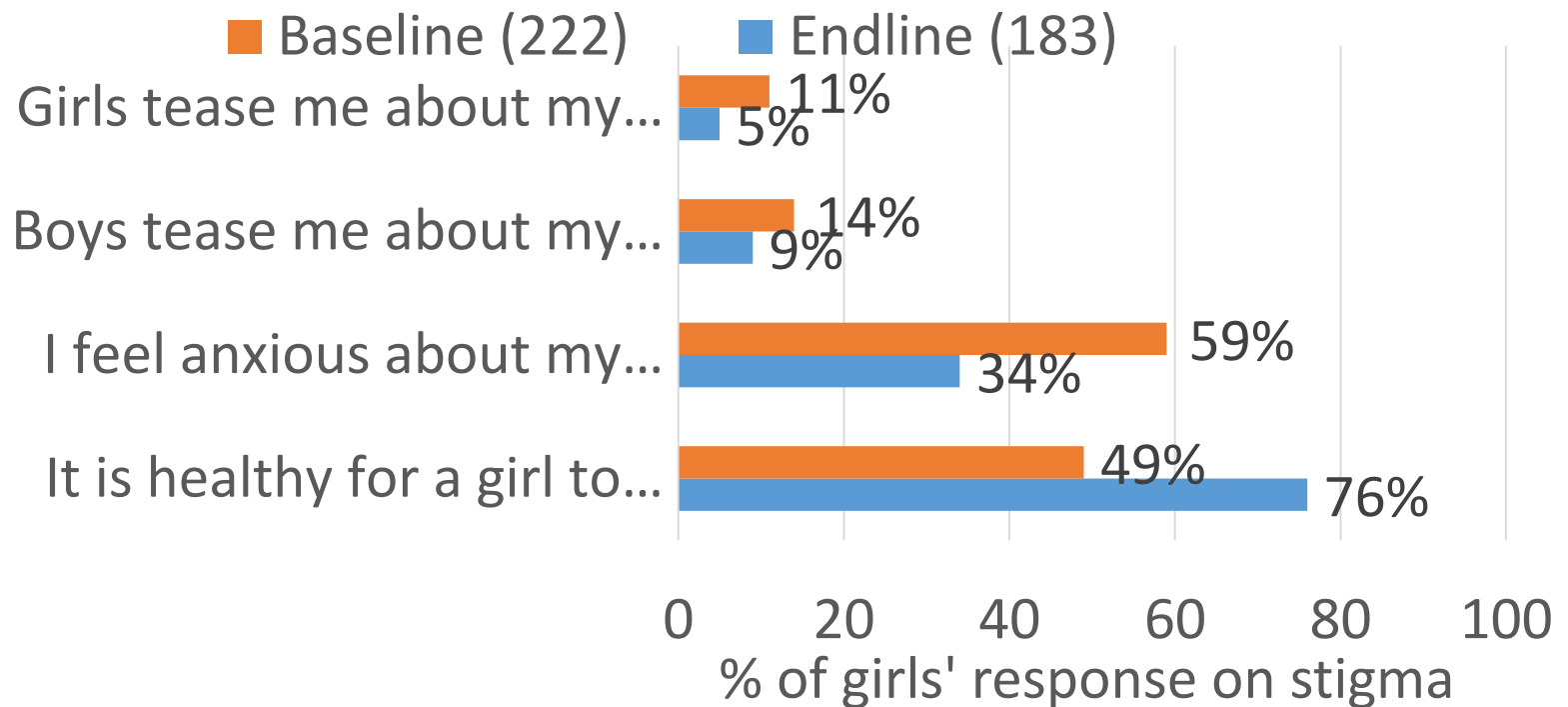
	Term 3 2017 (baseline) 99 girls		Term 2 2018 (end-line) 81 girls	
Number (N)	Non period-day	Period-day ¹	Non period-day	Period-day ¹
Number of days	2625	554	3829	787
N (%) not attending full day of sch.	8.5%	14.6%	11.6%	14.2%
Odds ratio (95% CI) ²	OR=2.17 (1.61-2.92)		OR=1.29 (1.02-1.63)	
N (%) not attending all classes	11.4%	19.9%	17.3%	20.5%
Odds ratio (95% CI) ²	OR=2.12 (1.64-2.74)		OR=1.26 (1.04-1.54)	

¹ Includes days of menses plus day prior to menses (results similar when restricted to days of menses) obtained from daily diaries for 9months

² Obtained from random effects logistic regression, allowing for within-girl clustering

Conclusion: Less association between menstruation and school absenteeism at end-line compared to baseline (p-value for interaction=0.006)

Outcome: Stigma and anxiety



Highlight of qualitative results

The menstrual kit has really helped us improve class attendance, some students who used to miss class because of menstrual cramps are now informed. They know how to manage menstrual cramps from the information they were given about menstrual pain management and even those that did not have pads now have reusable pads. **(FGD with girls)**

Ever since Meniscus came its easy, to change our pads compared to past times. Before we didn't have locks on doors but now Meniscus provided locks; we can easily change our pads without interference. They also provided bins where we throw the used disposable pads. **(FGD with girls)**

Challenges faced and way forward

Challenges	Way forward
<p>UNCST approval process delayed due to the menstrual cup</p> <p>Low turn up of parents for information sharing meetings during consent process</p>	<p>- Work closely with UNCST on key study areas before full submission of protocol</p> <p>- Engage parents earlier about the study with the help of school admin</p>
<p>Puberty education work plans and delivery not met as expected.</p> <p>Frequent exams and overlapping commitments</p>	<p>Involve a wider range of MHM champions in the school</p>
<p>High expectation for facilitation of project activities</p>	<p>Involve school administration when engaging teachers</p>
<p>Follow up of students when sent home for school fees on activity dates</p>	<p>Maintain communication and share activity work plans with schools</p>
<p>ToT participants raised an issue with the available sizes of knickers and the color of the backpacks</p>	<p>WoMena addressed this which is key to note in the future trial</p>
<p>Inconsistent person to fill water drums, clean toilets and empty sanitary bins</p>	<p>Engage schools in ownership and sustainability of interventions</p>

Conclusions & future plans

- Substantial improvements in MHM following introduction of the MENISCUS-2 intervention packages especially in knowledge of puberty and menstruation, reduced stigma and anxiety, pain management and WASH .
- Improving MHM can substantially improve girls' education, health and well-being.
- Results may be confounded with older age and difference in school attendance in different terms (e.g. due to examinations)
- The results from the pilot met our criteria to progress to a Phase 3 trial.
- Plans for a cluster-randomised trial in 30 schools to evaluate the impact of the MENISCUS-2 package on school attendance, performance, and other outcomes.



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Acknowledgement



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- **Start date:** April 1st 2017; **End date:** August 31st 2018
- **LSHTM:** Helen Weiss, Belen Torondel, Chris Bonell, Suzanna Francis, Clare Tanton.
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- **Makerere University:** Stella Neema
- **Educational consultant:** Connie Alezuyo



Dr George
Miiro

Q&A

THANK YOU



Save the Children