

ACADEMIC YEAR 2024-2025

HOPE FOR BASIC HYGIENE IN UGANDA

DEVELOPING A PARTICIPATORY HYGIENE EDUCATION PACKAGE FOR
VULNERABLE CHILDREN IN UGANDA

Bachelor dissertation submitted by **Lieselotte Ingels** for obtaining the diploma
Advanced Bachelor Global Citizenship and Development

Abstract

This bachelor dissertation explores how low-cost, participatory, and visual hygiene education can improve basic hygiene practices among vulnerable children in Uganda. The research was conducted during a six-month internship with Uganda Hands for Hope (UHfH) in the Namuwongo slum of Kampala, and through comparative fieldwork in the rural district of Kamuli. The central research question was: *“How can low-cost, participatory, and educational hygiene interventions improve hygiene practices among vulnerable children and adolescents in Uganda?”* Using qualitative methods such as participant observation, in-depth interviews, and focus groups, the study identified major gaps in hygiene awareness and practice, despite the availability of water infrastructure.

A child-friendly hygiene education package was developed and tested, including visual tools like stickers, posters, and pictogram-based booklets. Results showed that interactive, visual materials significantly increased children's engagement and improved their hygiene routines. Teachers and caregivers also reported positive behavioural changes among children.

The study concludes that effective hygiene education must be integrated into daily life and designed to be accessible, affordable, and locally relevant. Visual and participatory methods offer a powerful way to address hygiene poverty in informal settlements and rural communities.

Keywords: Hygiene, WASH, Uganda, vulnerable children, informal settlements, educational booklet, community, hand washing, health education

Acknowledgments

From November 9th, 2024 to May 7th, 2025, I had the privilege to experience a six-month internship that changed my life in ways I never thought possible. It was intense, emotional, sometimes challenging, but above all, deeply enriching. If there is one thing I have truly learned during this journey, it is to always be grateful. Grateful for every person, every encounter, every lesson, for the unforgettable memories that are now forever engraved in my heart. This internship shaped me into the person I am today, and I carry all the love, friendship, and connection I felt during these six months with me.

First and foremost, I want to thank the organization Uganda Hands for Hope, and the amazing children whose strength, resilience, and joy touched me deeply. To all the children of the community centre, your smiles and stories will forever remain in my heart. I also extend my sincere appreciation to Touch the Slum, Walk of Hope Foundation, Kidiki Secondary School, and AYDEL for welcoming me with open arms and allowing me to be part of their missions. Thank you for your trust, your collaboration, and for letting me learn from your impactful work.

A very special thank you to Saskia Smets, my supervisor. Thank you for your endless patience, for believing in me unconditionally, and for always being there. Your guidance and encouragement meant more to me than words can express.

To Ronald (Touch the Slum), Daniel (Walk of Hope Foundation), David (UHfH), Roberts (AYDEL), teacher Resty (Kidiki SS), and Frieda (*Okwagaanana*), thank you for collaborating with me on the research project, and for making it possible to conduct focus groups and interviews that contributed so meaningfully to my thesis.

To all the children and young people I met, you have taught me more than I could ever learn from a book. Thank you to the amazing kids I got to interview, to those who participated in our sessions, and to everyone who shared their stories with me. Felicita, thank you for supporting me during sessions. Imran, thank you for helping capture those moments in pictures and videos.

A heartfelt thank you to teacher Emma for taking me along to Katwe and helping me organize MDD lessons. To teacher Fred, teacher Pamela, procurement officer Emma, and Professor Dee, thank you for your patience, encouragement, and kindness. Teacher Emma and Aromo Procedure, thank you for helping translate from Luganda to English during our many important conversations and interviews. To my wonderful colleagues at UHfH Secondary

School, especially teacher Mary, my Luganda teacher, thank you for your guidance and for helping me integrate.

To my fellow Uganda students, thank you for sharing this journey with me and the close friendships we built. I already look forward to the day we sit together at the “Ugandan wedding table”, full of stories and memories. A special thanks to Malaika and Skills4Change, especially Jessy and Lara, for your generous donations of underwear, reusable menstrual pads, and baby diapers. Your kindness made a real difference.

To my fellow volunteers Ben, Finn, Oliver, and Conrad at Uganda Hands for Hope, thank you for the support, the laughs, and the shared purpose. And to Jessy, again, thank you for helping with the donation of toothbrushes and toothpaste.

To the many talented, courageous, and kind children I had the privilege of meeting, you taught me more than I could ever have imagined. To all the friends and extended family I made along the way, thank you for welcoming me into your lives.

To my dear Mommy and Daddy in Kampala, my incredible host family who gave me a home for four months, your warmth and care made Uganda feel like home. Thank you to Freddy and Joel for everything.

To my own family, my grandparents, parents, and everyone who supported me emotionally, practically, and financially, whether by donating, buying candy bags, or joining Race for Hope. Thank you for standing by my side and helping me make this dream a reality.

And finally, to everyone who holds a special place in my heart, *Nkwagala nyo*.

Forever grateful & with all my *omutima*,

Omusana, Mirembe, Lilo, Lizi, Betty, Maria, Lieselotte

Management Summary

A world where children have never brushed their teeth, where families share a single bar of soap, or where defecation into plastic bags is a necessity due to the absence of sanitation is not an imagined dystopia. It is the lived daily reality for many families in Namuwongo, one of Kampala's largest informal settlements. During my six-month internship at Uganda Hands for Hope (UHfH), I witnessed firsthand the deep and often tragic consequences of hygiene poverty. I observed children with untreated skin infections, open wounds, and emotional distress due to persistent body odour, lice, or lack of clean clothing. Several children were too ashamed to come to school. Some tragically died from preventable illnesses linked to poor hygiene. One four-year-old child passed away from tuberculosis in December 2024, a moment that marked a turning point in my research and personal trajectory.

This bachelor dissertation is rooted in that reality and seeks to contribute meaningfully to UHfH's mission of supporting vulnerable children and families. It investigates the following central research question: *"How can low-cost, participatory, and educational hygiene interventions improve hygiene practices among vulnerable children and adolescents in Uganda?"* This question is supported by three sub-questions:

"What is the importance of basic hygiene education in Namuwongo, Uganda?"

"What are the basic hygiene needs of vulnerable children living in this community?"

"How can we provide adequate and sustainable hygiene education for these children, considering their social and economic context?"

The aim of the research was to design, test, and evaluate a child-centred, context-sensitive hygiene education package co-developed with children, teachers, and UHfH staff. The core philosophy was to create materials that could be used independently by local educators after my departure, with a strong emphasis on visuality, simplicity, and inclusion. The final package consists of five components: a pictogram-based children's booklet (*"My Hygiene Superpowers"*), a comprehensive teacher's guide with five weeks of lesson plans, a large waterproof hygiene poster, colourful handwashing stickers for daily reminders, and participatory workshop materials tailored for children of varying literacy levels.

The methodology applied during this research was qualitative and participatory. It included participant observation at the UHfH school and community centre, in-depth interviews with children, caregivers, teachers, healthcare workers, and NGO staff, focus group discussions in both urban and rural locations, creative workshops, and continuous testing and feedback

loops. Fieldwork was carried out in Namuwongo and in Namwendwa village in Kamuli district, which enabled a comparative view of hygiene challenges across different settings.

The findings revealed that the problem extends far beyond the lack of access to materials. While families often struggle to afford soap, toothpaste, or sanitary products, the deeper issue is knowledge poverty. Many children and caregivers had never received education about hygiene's connection to health. For example, some children reported sharing one toothbrush among siblings or using water only for cooking, not for bathing or washing hands. Teachers, although eager to support hygiene education, lacked the resources and training to do so effectively. Cultural taboos and shame around topics like menstruation or body odour created further barriers to open dialogue. In schools and community centres, hygiene workshops (if conducted at all) were often irregular, underfunded, and ineffective.

Contrary to initial assumptions, water scarcity was not the main obstacle in Namuwongo. Clean water was often accessible via local taps or affordable sources. The barrier was largely behavioural. Children frequently did not wash their hands simply because they did not know why it was necessary. Without structured education, there was no motivation to practise hygiene, even when the materials were technically within reach. Statements such as *"it's not that important"* were frequently repeated by both children and adults, highlighting a severe gap in awareness and public health knowledge.

Despite these structural and cultural challenges, the intervention proved effective. The developed hygiene materials were well received by teachers, children, and caregivers. Children engaged enthusiastically with songs, pictograms, games, and storytelling activities. Teachers admitted that they, too, learned new facts about hygiene during the sessions and appreciated the structured, reusable format of the materials. The character *"Nanyonjo"*, the hygiene superhero featured in the children's booklet, quickly became a familiar and motivating figure for children, who were invited to earn "superpowers" by practising each hygiene domain: hand, oral, body, clothing, and environmental hygiene.

The emphasis on emotional well-being was also central. Many children shared that they felt embarrassed or excluded due to hygiene-related issues. The sessions created a safe and empowering space to talk about shame, confidence, and dignity. By promoting hygiene as a form of self-respect and care, rather than punishment or obligation, children began to internalise these practices not as chores, but as part of who they wanted to become. Adolescents, in particular, responded positively when treated as equal participants in conversations about personal hygiene and health. These results confirm that visual,

participatory tools (especially when co-created with local communities) are powerful in shifting behaviour.

The project's short-term impact was visible in daily practices. Teachers noted that children were washing their hands more regularly and were excited to participate in hygiene routines. Caregivers reported a greater awareness among their children about cleanliness at home. Though the internship's duration did not allow for long-term impact measurement, the materials were intentionally designed for sustainable use. All materials were left in both digital and printed formats. Laminated booklets and posters are now part of UHfH's permanent toolkit. Teachers like Felicita at the school, and community volunteers such as Aromo Procedure, were trained and empowered to continue delivering sessions independently. This helped ensure that the knowledge and habits introduced during my stay would continue to grow beyond it.

Based on the research results, the conclusions of the study can be summarised as follows: first, knowledge poverty, not merely a lack of materials, is a fundamental driver of poor hygiene. Second, visual, child-centred, and participatory education is highly effective in contexts of low literacy and limited infrastructure. Third, teachers and caregivers are eager to support hygiene learning but need tools, training, and institutional support. Fourth, shame and social stigma prevent children from seeking help or practicing hygiene consistently, especially in relation to menstruation and body odour.

As such, the following strategic recommendations are proposed for UHfH. At the macro-level, UHfH may consider advocating for the integration of hygiene education into the national primary school curriculum. Engaging with the Ministry of Education, the WASH cluster, or development partners such as UNICEF and Plan International could help promote structured hygiene teaching at scale. UHfH's model could serve as a pilot or case study to inspire wider adoption.

At the meso-level, UHfH should continue investing in internal capacity building. Teachers and social workers should be trained to deliver hygiene sessions regularly and with confidence. Parent workshops or community engagement sessions could help extend the impact to the home environment, reinforcing school-based education. Collaboration with other local NGOs, such as Touch the Slum, African Youth Development Link, and Walk of Hope Foundation, could open up opportunities for resource sharing, co-creation, and collective impact.

At the micro-level, UHfH can embed hygiene education into weekly routines. Children already responded positively to structured habits like singing the "Wash Your Hands" song before

meals or using sticker charts to track progress. Continued distribution of essential hygiene products (such as toothbrushes, soap, and reusable menstrual items) can enhance the practical application of learned behaviours. Out-of-school children, particularly those under five who attend the community centre, must be prioritised, as they are especially vulnerable yet often excluded from formal interventions.

In terms of future research, this project lays a valuable foundation for further exploration. Longitudinal studies could assess whether hygiene education leads to measurable improvements in school attendance or reductions in preventable diseases. The “train-the-trainer” model could be expanded, empowering older students or parents to become peer educators. Future materials could be translated into Luganda or other local languages to enhance inclusivity. Furthermore, boys must be more intentionally included in discussions around menstrual hygiene, as breaking taboos requires full gender participation.

In conclusion, this research confirms that even in contexts of extreme poverty, meaningful and sustainable change is possible when education is accessible, participatory, and grounded in the lived realities of those it seeks to serve. Hygiene is not just about health, it is about self-worth, dignity, and opportunity. By integrating hygiene education into UHfH’s broader programming, the organisation can continue to lead by example, empowering children not only to survive, but to thrive. The hygiene education package is a tangible step toward that future. The impact of this project is best captured in the words of a child who said, *“Now I know why I should wash my hands and brush my teeth. I feel clean and proud.”* These words reflect the core purpose of this research: not simply to inform, but to restore dignity, promote well-being, and build lasting change, one basic hygiene habit at a time.

ABSTRACT	2
ACKNOWLEDGMENTS	3
MANAGEMENT SUMMARY	5
LIST OF ABBREVIATIONS	12
1 INTRODUCTION.....	13
2 PROBLEM DEFINITION	15
3 CONCEPTUAL FRAMEWORK	17
3.1 INTRODUCTION TO HYGIENE: HISTORICAL AND THEORETICAL PERSPECTIVES	17
3.2 UNDERSTANDING HYGIENE: DEFINITIONS AND KEY TYPES	18
3.3 BASIC HYGIENE: DEFINITIONS AND RELEVANCE IN UGANDA.....	19
3.4 KEY HYGIENE PRACTICES	21
3.4.1 Hand hygiene	21
3.4.2 Body hygiene	22
3.4.3 Clothing hygiene	23
3.4.4 Oral hygiene.....	24
3.4.5 Environmental hygiene.....	25
3.4.6 Sanitation and the elimination of open defecation.....	26
3.4.7 Menstrual hygiene management (MHM)	28
3.5 THE IMPORTANCE OF HYGIENE	29
3.6 HYGIENE POVERTY AND INEQUALITY	29
3.6.1 Consequences of hygiene poverty.....	30
3.6.2 Strategies to address hygiene poverty	31
3.7 THE ROLE OF INTERNATIONAL HYGIENE DAYS	33
3.8 INTEGRATION INTO THE FINAL PRODUCT	33
4 CONTEXTUAL FRAMEWORK	35
4.1 MACRO-LEVEL: NATIONAL CONTEXT AND PUBLIC HEALTH LANDSCAPE	35
4.1.1 Poverty and infrastructure deficits	35
4.1.2 Disease burden and public health gaps	35
4.1.3 WASH inequity and policy gaps	36
4.1.4 Neglected domains: oral and menstrual hygiene	36
4.1.5 Structural and systemic barriers.....	37
4.1.6 Cultural norms and behaviour change barriers	37
4.1.7 Macro-level relevance to research design.....	38
4.2 MESO-LEVEL: ORGANIZATIONAL CONTEXT	39
4.2.1 General objectives	39

4.2.2 Namuwongo: local context of vulnerability and need.....	39
4.3 MICRO-LEVEL.....	41
4.3.1 Case study A	43
4.3.2 Case study B.....	45
5 METHODOLOGY	47
5.1 DATA COLLECTION.....	48
5.1.1 Literature study	48
5.1.2 Participant observation and informal conversations.....	49
5.1.3 Unstructured in-depth interviews	50
5.1.4 Semi-structured in-depth interviews.....	52
5.1.5 Focus group discussion and anonymous surveys	54
5.1.6 Educational sessions and product testing	54
5.1.7 Ethical considerations.....	54
5.2 DATA ANALYSIS.....	55
5.3 CRITICAL REFLECTION	56
6 RESEARCH RESULTS: ANALYSIS INTERVIEWS.....	59
6.1 THE IMPORTANCE OF BASIC HYGIENE EDUCATION IN NAMUWONGO.....	59
6.1.1 Lack of hygiene knowledge as a root cause of illness and mortality	59
6.1.2 Absenteeism and shame: the educational cost of hygiene poverty.....	60
6.1.3 Language and cultural barriers to learning.....	60
6.1.4 Education works: observed change after sessions	61
6.1.5 Awareness as the first line of defence.....	61
6.2 THE HYGIENE NEEDS OF VULNERABLE CHILDREN	62
6.2.1 Lack of basic hygiene items and persistent hygiene poverty	62
6.2.2 Vulnerability	64
6.2.3 Teachers and caregivers need more support	65
6.2.4 Education and materials.....	65
6.3 HOW TO PROVIDE ADEQUATE AND SUSTAINABLE HYGIENE EDUCATION.....	66
6.4 SUMMARY OF INTERVIEW ANALYSIS.....	68
7 RESEARCH RESULTS: PROJECT AND PRODUCT	70
7.1 DESCRIPTION	70
7.2 DEVELOPMENT PROCESS.....	73
7.2.1 Prototype development	73
7.2.2 Testing and evaluation	76
7.2.3 Sustainability	78
8 CONCLUSIONS AND RECOMMENDATIONS	80

8.1 STRENGTHS.....	81
8.2 LIMITATIONS	81
8.3 RECOMMENDATIONS	82
8.3.1 Macro-level.....	82
8.3.2 Meso-level	83
8.3.3 Micro-level.....	84
8.3.4 Future research	84
9 BIBLIOGRAPHY	86
10 ATTACHMENTS.....	93
10.1 APPENDIX A: GENAI-STATEMENT.....	93
10.2 APPENDIX B: INTERVIEW TRANSCRIPT – RONALD ELIGU (TOUCH THE SLUM)	94
10.3 APPENDIX C: INTERVIEW TRANSCRIPT – TEACHER RESTY (KIDIKI SECONDARY SCHOOL)	98
10.4 APPENDIX C: STICKER	102
10.5 APPENDIX D: POSTER	103
10.6 APPENDIX E: BASIC HYGIENE BOOKLET.....	104
10.7 APPENDIX F: ASSIGNMENT FOR CHILDREN	115
10.8 APPENDIX G: TEACHER’S GUIDE FOR HYGIENE EDUCATION	116

List of abbreviations

AYDEL	African Youth Development Link
CDC	Centers for Disease Control and Prevention
CLTS	Community-Led Total Sanitation
GDP	Gross Domestic Product
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
MHHM	Menstrual Health and Hygiene Management
MHM	Menstrual Hygiene Management
NGO	Non-governmental organization
NSHIF	National Sanitation and Hygiene Improvement Framework
PTAs	Parent–teacher associations
SDG	Sustainable Development Goal
SS	Secondary School
UHfH	Uganda Hands for Hope
UN	United Nations
UNICEF	United Nations International Children’s Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

1 Introduction

"One child told me he had never brushed his teeth. Others shared that they owned only one pair of underwear or never wash their hands after using the toilet. These were not isolated stories, but daily realities in Namuwongo."

Basic hygiene is one of the most fundamental determinants of human health. Yet in Uganda's informal settlements and rural communities, thousands of children continue to suffer and die from preventable diseases caused by a lack of hygiene knowledge, resources, and infrastructure. During my six-month internship in Namuwongo, a slum area in Kampala, I directly witnessed the severe impact of poor hygiene practices on children's lives. Some children owned no toothbrush, some had never brushed their teeth, and many lacked clean clothing or access to menstrual hygiene products. Several students and children in the community died during my stay from easily preventable conditions such as diarrhoea, or infections exacerbated by poor hygiene.

What struck me most, however, was not only the lack of materials but the absence of awareness. Many children and even teachers had never learned why handwashing mattered. There was a deep gap in understanding the basic principles of hygiene and their link to health. Statements like "it's not that important" were often repeated by them. I had assumed water scarcity was the main barrier, but I found that water was usually available, either through free public taps or affordable sources. The issue, rather, was educational and structural: hygiene was not taught consistently, and behaviour change had never been prioritized.

This bachelor dissertation seeks to address this gap. Through participatory observation, interviews with key actors (including NGO leaders, teachers, children, and caregivers), and the development of visual educational tools, I explored how low-cost, contextually appropriate, and participatory hygiene education can significantly impact children's health practices. Particular attention was given to visual communication (stickers, posters, pictogram-based booklets) for non-literate or early learners, and to basic hygiene as a highly neglected but critical topic.

In addition to urban Namuwongo, I conducted comparative fieldwork in the rural district of Kamuli to examine hygiene awareness and resources in different contexts. Both environments revealed distressing gaps, but also opportunities: children responded enthusiastically to songs, roleplays, and visual tools such as the "Wash Your Hands" song adapted from *Baby Shark*. Teachers were eager to learn when provided with clear guidance and usable materials.

My approach emphasized sustainability by empowering local educators, involving children actively, and designing materials that could continue to be used after my departure.

The findings of this research highlight the urgent need for structural integration of hygiene education into both formal and informal learning spaces. Without knowledge, there is no motivation to practice hygiene, even when resources are available. This dissertation offers both an analysis of the problem and a tested intervention in the form of a hygiene education package for children and teachers.

2 Problem definition

This bachelor's dissertation is product-based research, which differs from a traditional theoretical dissertation. The central aim was to develop a practical training package on basic hygiene, specifically tailored to the needs of vulnerable children and teachers in Uganda.

The target group consists of children attending Uganda Hands for Hope (UHfH) school as well as children attending the local community centre of UHfH in Namuwongo slum. UHfH was my internship placement for six months (November 2024 to May 2025). The organization works with the most vulnerable families in the Namuwongo slum to reduce poverty and meet their basic needs through education, nutrition, and social support.

The decision to focus on this topic emerged through participant observation, during which it became painfully clear that both children and teachers lack knowledge, resources, and awareness regarding basic hygiene practices. Some children fell ill or stayed home due to preventable infections, while others tragically died from diseases that could have been avoided with simple hygiene measures.

The main purpose of this dissertation was to support vulnerable children through targeted hygiene education and to design a training package that could improve both knowledge and awareness among children and their teachers. The ultimate goal is to create sustainable, context-specific teaching materials that teachers can use regularly and consistently to reinforce hygiene habits and lead by example.

In order to create a product that was adapted to the specific context of UHfH and Namuwongo, research was conducted to understand the hygiene-related needs and perceptions of the children and staff. Therefore, the following main research question was formulated:

“How can low-cost, participatory, and educational hygiene interventions improve basic hygiene practices among vulnerable children and adolescents in Namuwongo, Uganda?”

Through informal conversations, participatory observation, focus groups, and interviews with children, parents, teachers, and NGO staff, it became evident that additional knowledge about hygiene was urgently needed. Particularly knowledge that explained why hygiene matters and how it can be practiced effectively and affordably. This led to the formulation of three sub-questions:

- *“What is the importance of basic hygiene education in Namuwongo, Uganda?”*
- *“What are the basic hygiene needs of vulnerable children living in this community?”*
- *“How can we provide adequate and sustainable hygiene education for these children, considering their social and economic context?”*

3 Conceptual framework

To answer the research questions and develop a useful product, a comprehensive conceptual framework is essential. This section outlines the key theoretical concepts that underpin hygiene education. The conceptual framework connects determinants of basic hygiene with structural barriers such as hygiene poverty and identifies strategic interventions tailored to the realities of Namuwongo, Kampala.

3.1 Introduction to hygiene: historical and theoretical perspectives

The term "hygiene" originates from the Greek word *hygieinos*, meaning "healthful". Today, it encompasses practices that promote health by maintaining cleanliness and preventing disease (WHO, 2020). Personal hygiene includes hand washing, bathing and oral hygiene, but the broader concept also includes food safety, sanitation and environmental health (CDC, 2019). Different perspectives shape the meaning of hygiene. For a parent it means a clean house, for a microbiologist it is about stopping the spread of pathogens. Anthropologists view hygiene through cultural (emic) and scientific (etic) lenses, while historians trace the shift from a general concept of health to more personal and social practices over time (Anderson, 2012). Scientific advances such as Louis Pasteur's germ theory, developed in the 1860s, revolutionised hygiene, leading to better sterilisation, vaccination and disease control (Jones et al., 2017).

Simple practices such as washing hands with soap can reduce diarrhoeal diseases by up to 50% (Miller & Taylor, 2016). Proper food hygiene helps prevent infections such as salmonella and *E. coli* (NIH, 2015). Hygiene at the community level is vital for public health: clean water, waste management and sanitation systems. Initiatives such as Swachh Bharat Abhiyan (Clean India Mission), launched by the Indian government in 2014, aim to eliminate open defecation and improve waste management infrastructure (Gibson & Harper, 2013). This programme is an example that has led to measurable improvements in sanitation coverage and public health outcomes across rural and urban India. Globally, hygiene plays a crucial role in sustainable development. United Nations (UN) Sustainable Development Goal (SDG) 6 emphasises access to clean water and sanitation as essential for health, dignity and economic progress (WHO, 2020). Programmes like WASH by the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) improve hygiene standards, especially in low-income regions, reducing child mortality and waterborne diseases (Williams & Green, 2010). In short, hygiene is essential for health at personal, community and global levels. Promoting hygiene awareness, investing in infrastructure and

ensuring access to hygiene services can significantly improve quality of life and public health outcomes.

3.2 Understanding hygiene: definitions and key types

The World Health Organization (2020) defines hygiene as the set of practices that maintain health through cleanliness, including hand hygiene, food safety, and sanitation. The Centers for Disease Control and Prevention (CDC) similarly emphasizes hygiene as essential in preventing infectious diseases (CDC, 2019). Scholars describe hygiene as a scientific and behavioural approach to health, incorporating both personal habits and environmental conditions (Jones et al., 2017; Park, 2021; Smith & Brown, 2018).

“Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases (WHO, 2009).”

According to Davis (2014), hygiene combines personal practices and public systems essential for disease prevention. Gibson and Harper (2013) expand this to include policies and infrastructure. Anderson (2012) sees hygiene as a structured strategy to reduce exposure to pathogens, while Roberts (2011) and Williams and Green (2010) highlight its role in healthcare and public health. Hygiene, ultimately, is a cornerstone of preventive medicine (Harrison, 2007).

Table 1: Types of hygiene

Personal hygiene	Includes keeping body and clothes clean, proper living habits and healthy lifestyle. These habits support both physical and mental well-being, lower the risk of infections and enhance social interactions (Humanitarian Global, 2021). ○ <i>Hand hygiene:</i> Wash hands with soap for at least 20 seconds before eating, after using the toilet, touching pets, during illness and after contact with public surfaces to prevent infections. ○ <i>Oral hygiene:</i> Brush teeth twice daily, floss, and use mouthwash to prevent bad breath, cavities and gum disease. This boosts both health and confidence. ○ <i>Body hygiene:</i> Bathe daily with water around 40°C to remove sweat, dead skin and bacteria. Wear clean clothes daily, especially underwear, to stay fresh and prevent skin issues.
-------------------------	--

	○ <i>Hair and scalp hygiene:</i> Wash hair regularly with shampoo and conditioner to avoid dandruff, lice, and scalp infections. This helps maintain oil balance and scalp cleanliness. ○ <i>Nail and foot hygiene:</i> Trim nails regularly to prevent dirt buildup and bacteria transfer. Wash and moisturize feet, wear breathable shoes and clean nail tools to avoid fungal infections, odor and blisters. ○ <i>Intimate hygiene:</i> Men should wash the genital area with warm water or mild soap. Women should avoid douching, wear breathable underwear, and change menstrual products regularly. ○ <i>Coughing and sneezing:</i> Cover your mouth and nose with a tissue or handkerchief. Wearing a mask in public can help reduce the spread of germs and viruses.
Environmental hygiene	Focuses on maintaining clean public and private spaces through disinfection, pest control and waste management to prevent disease transmission (Humanitarian Global, 2021). Safe collection, segregation, and disposal of waste to prevent contamination.
Domestic hygiene	Refers to household cleanliness, including proper food preparation, laundry and bathroom sanitation, which promotes a healthy living environment (Humanitarian Global, 2021).
Food hygiene	Encompasses safe food handling, storage and preparation practices to avoid contamination and foodborne illness, in line with health regulations (Humanitarian Global, 2021).

3.3 Basic hygiene: definitions and relevance in Uganda

While hygiene broadly encompasses a range of practices promoting cleanliness and disease prevention in personal, domestic, and public settings, basic hygiene refers specifically to the minimum standard of hygiene services and behaviours necessary to maintain health, as defined by global WASH monitoring frameworks. This study focuses on basic hygiene, in alignment with SDG indicator 6.2.1(b), due to the socio-economic and environmental living conditions of the target population in Uganda, where access to even fundamental hygiene services remains limited.

“In the context of UN's SDG 6, basic hygiene generally refers to the practices and conditions that help maintain health and prevent the spread of disease (WHO/UNICEF, 2021;

2024). The Joint Monitoring Programme (JMP) defines it as a set of behaviours including handwashing, food hygiene, and menstrual hygiene management. Specifically, it encompasses having access to handwashing facilities with soap and water, as well as practicing good personal hygiene to prevent the transmission of diseases.”

Basic hygiene refers to the conditions and practices essential for maintaining health and preventing the transmission of infectious diseases (WHO/UNICEF, 2021). It encompasses various aspects such as hand hygiene, personal cleanliness, oral care, menstrual hygiene management (MHM), food safety, and environmental sanitation. The WHO/UNICEF Joint Monitoring Programme (JMP) defines a basic hygiene service as the availability of a handwashing facility with soap and water on premises in households, schools, and healthcare settings, as you can see in figure 1 (WHO/UNICEF, 2021; 2024). This is monitored under SDG indicator 6.2.1(b).

SERVICE LEVEL	DEFINITION
BASIC	Availability of a handwashing facility with soap and water at home
LIMITED	Availability of a handwashing facility lacking soap and/or water at home
NO SERVICE	No handwashing facility at home

FIGURE 72 SDG service ladder for hygiene

Note: Handwashing facilities may be located within the dwelling, yard or plot. They may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents.

Figure 1: SDG service ladder for hygiene (WHO/UNICEF, 2021)

Within the framework of the SDGs, target 6.2 explicitly incorporates hygiene and aspires to achieve universal access to adequate sanitation and hygiene by 2030, with particular attention to the needs of women, girls, and vulnerable populations (United Nations, 2015). Despite global progress, significant disparities persist. In Uganda, for instance, only 36% of households had access to basic hygiene services in 2020, and by 2023, an estimated 2.2 million people still engaged in open defecation (WaterAid Uganda, 2024; WHO/UNICEF, 2021).

The inclusion of hygiene under SDG 6 “Clean water and sanitation” marks a pivotal advancement from the Millennium Development Goals (MDGs), where it was notably absent. Now firmly embedded within the WASH (Water, Sanitation and Hygiene) agenda, hygiene is recognised as integral to public health, human dignity, and gender equity (WHO/UNICEF, 2021). By improving hygiene standards, especially in low-resource settings, progress can be made not only toward disease prevention but also toward broader goals of social justice and sustainable development.

3.4 Key hygiene practices

Hygiene is a cornerstone of public health, historically linked to significant reductions in mortality and the transmission of infectious diseases. Effective hygiene practices reduce disease burden, enhance well-being, and promote dignity, particularly in low-resource settings such as Namuwongo (Curtis & Cairncross, 2023; WHO, 2022). This section provides a detailed overview of seven key hygiene practices that are widely recognized in the global WASH framework. Each of these components contributes to a holistic understanding of hygiene as a determinant of health. They are particularly relevant in the context of densely populated and underserved communities such as Namuwongo, Kampala. This chapter aims to objectively examine the importance of each domain for public health based on current literature and data. Later sections discuss which practices were prioritised in the development of the research product and why.

3.4.1 Hand hygiene

Hand hygiene, particularly handwashing with soap and water, is one of the most effective and low-cost public health interventions available, reducing diarrhoeal disease by up to 40% and respiratory infections by 21% (WHO, 2022). Despite its proven benefits, access to hand hygiene remains alarmingly low in many parts of the world. In 2020, 2.3 billion people lacked access to basic hand hygiene services, with more than 670 million having no facility at all (WHO/UNICEF, 2021).

In Uganda, only 36% of the population had access to basic hygiene services at the household level as of 2020 (WHO/UNICEF, 2021). This shortfall disproportionately affects vulnerable populations, especially children and teachers in schools where hygiene infrastructure is often inadequate. The absence of functioning handwashing stations with soap and water limits the

ability to prevent outbreaks of diarrhoeal diseases and respiratory infections. Both diseases remain leading causes of absenteeism and poor health outcomes among school-age children (UNICEF, 2020).

Schools and healthcare facilities are critical environments where hand hygiene plays a central role in infection prevention. However, according to the 2024 JMP report, only 57% of health care facilities globally had basic hand hygiene services, with significantly lower rates reported in Sub-Saharan Africa (WHO/UNICEF, 2024). The implications for infection control, maternal care, and child health are profound. In many Ugandan schools, the lack of soap, water, or dedicated facilities leaves both students and teachers at increased risk.

Community-based interventions, such as hygiene promotion campaigns, behaviour change communication, and low-cost technologies like tippy taps, have demonstrated effectiveness in improving hand hygiene behaviours in resource-limited contexts. For example, in informal settlements like Namuwongo in Kampala, targeted programmes have led to improvements in knowledge and practices, though sustaining change remains a challenge without consistent access to materials and institutional support (Vujcic et al., 2015).

Ensuring universal access to hand hygiene should be a public health priority, particularly in schools and healthcare settings. Doing so would not only reduce disease burden but also promote equity, dignity, and the right to health for all, especially Uganda's most vulnerable children and educators.

3.4.2 Body hygiene

Body hygiene, the regular cleaning of the skin, hair, and nails, is fundamental to preventing skin infections, parasitic infestations, and communicable diseases. It also contributes significantly to personal dignity, mental well-being, and social inclusion, especially among school-age children and adolescents. Inadequate body hygiene is closely linked to poverty, limited access to water, and a lack of culturally appropriate hygiene education, all of which remain challenges in various regions of Uganda (UNICEF, 2018; WHO, 2022).

In school settings, poor body hygiene can lead to stigma, bullying, and absenteeism, particularly among vulnerable children who lack regular access to bathing facilities. This is especially critical for girls entering puberty, who may face additional barriers to personal hygiene related to menstruation and gender norms (Sommer et al., 2015). Teachers, too, may struggle to maintain adequate body hygiene due to overcrowded living conditions, water

scarcity, or insufficient school infrastructure, which can affect their ability to model healthy hygiene behaviours.

Although body hygiene is often considered a private matter, its implications for public health are substantial. For example, skin diseases such as scabies, fungal infections, and impetigo are common in overcrowded environments with limited washing opportunities (Krentz et al., 2021). These conditions are often contagious, causing outbreaks that disrupt school attendance and increase healthcare costs. Regular bathing with soap and access to clean water are essential preventive measures but are frequently unavailable in low-income households or schools.

The promotion of body hygiene in Ugandan schools and communities requires more than infrastructure alone. Behaviour change communication, integration of hygiene education into curricula, and culturally sensitive programming are vital. Practical solutions such as school-based hygiene clubs, peer-led demonstrations, and community water access points can enhance knowledge and encourage routine bathing practices, even in resource-limited settings (UNICEF, 2018).

Ensuring that children and educators have the means, knowledge, and dignity to care for their bodies is not merely a personal issue, it is a public health imperative. Targeted investments in water access, hygiene education, and community engagement are necessary to improve body hygiene outcomes in Uganda's vulnerable populations.

3.4.3 Clothing hygiene

Clothing hygiene is the regular cleaning, drying, and maintenance of garments. It is a vital yet frequently overlooked dimension of public health and personal dignity. In warm and humid climates such as Uganda's, unwashed or damp clothing can serve as a vector for bacteria, fungi, and ectoparasites such as lice and scabies, especially among school-age children living in overcrowded or low-resource environments (Bloomfield et al., 2009; Krentz et al., 2021).

Most schools in Uganda, including public and private institutions, enforce a school uniform policy, often beginning as early as pre-primary level (MoES, 2022a). While uniforms promote equality and school identity, they also impose a financial burden on families who may lack the resources to purchase and maintain multiple sets. When children have only one uniform, frequent washing becomes difficult, and they may attend school in visibly soiled clothing or miss school altogether due to stigma or discomfort (UNESCO, 2021).

Boarding schools, which serve a substantial proportion of secondary students in Uganda, are often assumed to provide adequate laundry facilities. However, recent assessments reveal that fewer than 30% of boarding schools have spaces for clothing maintenance such as ironing rooms, and only 44% provide designated drying lines (MoES, 2019). This inadequate infrastructure limits the ability of both students and staff to practice proper clothing hygiene, increasing the risk of skin infections and impacting psychosocial well-being.

Poor clothing hygiene also has social consequences. Dirty or damaged clothing is frequently associated with stigma and bullying, which disproportionately affects vulnerable children, especially those from poor households, orphaned backgrounds, or refugee communities (Sommer et al., 2015; UNICEF, 2018). For adolescent girls, these challenges are often compounded by inadequate menstrual hygiene options and the reuse of undergarments in the absence of proper washing and drying facilities.

Promoting clothing hygiene in Ugandan schools requires a multi-faceted approach: improving access to water and soap, building or upgrading laundry areas, and integrating hygiene education into school curricula. Peer-led hygiene clubs, community-run laundry spaces, and low-cost innovations (such as solar-powered drying racks or rainwater harvesting systems) can enhance clothing hygiene in both day and boarding schools (UNICEF, 2018).

Ultimately, clothing hygiene should not be treated as a peripheral issue. It plays a central role in children's health, self-esteem, school attendance, and social inclusion. Ensuring access to clean, appropriate clothing is a tangible way to uphold the dignity and health of both learners and educators across Uganda.

3.4.4 Oral hygiene

Oral hygiene is the daily care of teeth, gums, and the mouth. This is a foundational aspect of general health that is often undervalued in public health programming. Poor oral hygiene can lead to dental caries, periodontal disease, halitosis, and even systemic infections such as endocarditis (Petersen & Ogawa, 2016; WHO, 2022). It also significantly affects nutrition, self-esteem, school performance, and work productivity.

In Uganda, oral health is frequently neglected within both health systems and educational settings. Many schools do not include oral hygiene in the curriculum, and preventive dental care is rarely accessible to low-income communities. According to the Ministry of Health (2021), dental caries remains one of the most common health conditions in Ugandan children,

especially in urban slums and rural districts. The lack of routine check-ups, combined with inadequate access to fluoride toothpaste and toothbrushes, contributes to a growing oral health burden.

Children from vulnerable backgrounds are particularly affected. Without the means to purchase basic oral hygiene products or access professional care, many experience chronic toothache, infections, or tooth loss. These issues not only impact physical health but also lead to absenteeism from school, difficulty eating, and social stigma (Mbawalla et al., 2010). For teachers, oral health problems can compromise communication, classroom engagement, and professional confidence.

Oral hygiene also reflects broader inequalities in water access, hygiene knowledge, and household income. In areas where safe water is limited, families may prioritize drinking and cooking needs over toothbrushing. Cultural misconceptions, such as the belief that primary teeth do not require care, further delay early prevention (Musinguzi et al., 2020).

Integrating oral hygiene promotion into school health programs is a proven strategy for prevention (Petersen & Kwan, 2010; UNICEF, 2018). School-based brushing programmes, community dental outreach, and partnerships with local health providers have demonstrated positive outcomes in East African contexts. Additionally, training teachers as oral health champions and distributing low-cost hygiene kits can empower both children and educators to adopt and maintain better oral health practices.

Improving oral hygiene in Ugandan schools and communities requires cross-sector collaboration between education, health, and WASH actors. Ensuring that children and teachers can access the tools, information, and services to care for their mouths is essential not just for preventing disease, but also for advancing equity, confidence, and quality of life.

3.4.5 Environmental hygiene

Environmental hygiene refers to the control of physical factors in the surroundings that may adversely affect health, including the cleanliness of surfaces, floors, classrooms, latrines, waste areas, and water storage facilities (WHO, 2020). It plays a critical role in interrupting the transmission of infectious diseases in densely populated spaces such as schools, where poor environmental conditions can rapidly escalate into outbreaks of diarrhoea, respiratory infections, or vector-borne diseases.

In Uganda, many schools especially in low-income or rural areas face significant challenges in maintaining clean and safe environments. A 2022 survey by Uganda's Ministry of Education and Sports found that over 40% of public primary schools lacked adequate waste disposal systems, and nearly 30% had no regular cleaning schedules in place (MoES, 2022a). Such gaps in environmental hygiene contribute to a high burden of illness among both learners and teachers, often resulting in absenteeism, reduced academic performance, and increased healthcare costs.

Environmental hygiene is particularly important for young children, whose immune systems are still developing and who are more likely to play on the ground, share materials, and put their hands in their mouths. Contaminated classroom floors, shared desks, latrines, or food preparation areas can all serve as reservoirs for disease-causing organisms, especially when regular cleaning with water and disinfectants is not carried out (Cumming et al., 2016).

Proper environmental hygiene also enhances the dignity and morale of school communities. Clean and orderly surroundings foster pride, encourage responsible behaviour, and create environments more conducive to learning. Conversely, unhygienic surroundings can undermine health education efforts by modelling neglect and exposing children to unsafe practices.

Improving environmental hygiene in Ugandan schools requires a combination of infrastructure investment, behaviour change, and institutional support. Key interventions include establishing clear cleaning routines, training janitorial staff and student hygiene clubs, ensuring regular waste collection and disposal, and providing adequate cleaning supplies such as brooms, disinfectants, and protective gloves. In some settings, parent-teacher associations (PTAs) have played an active role in mobilising resources and community participation to maintain school hygiene standards (UNICEF, 2018).

Environmental hygiene is not a luxury, it is a fundamental component of healthy learning environments. Strengthening environmental cleanliness in schools, particularly in underserved regions of Uganda, is essential to safeguarding children's right to health, education, and dignity.

3.4.6 Sanitation and the elimination of open defecation

Access to safe and dignified sanitation is a fundamental human right and a cornerstone of public health. Sanitation involves the safe management of human excreta through hygienic

facilities, proper waste disposal, and behaviours that prevent environmental contamination. Eliminating open defecation is critical not only for health, but also for equity, dignity, and educational access, particularly for vulnerable children and teachers in resource-constrained settings (WHO/UNICEF, 2021).

“Open defecation, defined as the disposal of human waste in fields, bushes, open water, or plastic bags (commonly known as “flying toilets”), occurs when individuals lack access to toilets (WaterAid Uganda, 2023).”

Though it may seem extreme, the practice of open defecation remains a reality for many Ugandans. As of 2020, approximately 5% of Uganda’s population (about 2.2 million people) still practiced open defecation, particularly in rural and underserved areas (WaterAid Uganda, 2023). Open defecation pollutes the environment, spreads infectious diseases, and is closely linked to child mortality, poor nutrition, and persistent poverty.

Schools are particularly affected. A 2022 government report revealed that only 64% of primary schools in Uganda had access to functional latrines meeting basic hygiene standards (MoES, 2022b). Inadequate sanitation facilities often lack privacy, cleanliness, or sufficient capacity, especially for girls, children with disabilities, and female teachers. These shortcomings not only increase the risk of diarrhoeal disease and helminth infections but also undermine learning, participation, and dignity (Sommer et al., 2015).

The consequences extend beyond health. Girls frequently miss school during menstruation when sanitation facilities are unsafe or unavailable. Teachers working in schools without adequate toilets may feel demoralised and professionally unsupported. These dynamics reinforce gender inequality and contribute to absenteeism, school dropout, and staff turnover.

To eliminate open defecation, Uganda has implemented community-led total sanitation (CLTS) programs, school WASH campaigns, and policy initiatives aimed at improving infrastructure and behaviour. However, progress remains uneven. Sustainable improvement requires integrated approaches that combine investment in infrastructure (e.g., gender-segregated toilets, water points, menstrual hygiene disposal units), hygiene education, and community engagement. The involvement of school management, parents, and local authorities is essential to ensure continued functionality, maintenance, and use.

Ending open defecation is not simply a matter of building latrines. It is about protecting children's health, promoting gender equity, supporting teachers, and creating a safe and inclusive learning environment. Ensuring every child and educator has access to a clean, private, and safe toilet is central to achieving health and education goals in Uganda.

3.4.7 Menstrual hygiene management (MHM)

Menstrual hygiene management (MHM) is a critical yet historically overlooked aspect of health, gender equity, and education (Sommer et al., 2015; UNICEF, 2019). It refers to the use of clean menstrual materials, access to safe and private sanitation facilities, water and soap, and accurate information about menstruation. Inadequate MHM affects not only physical health but also school attendance, psychosocial well-being, and dignity, particularly for adolescent girls in resource-limited settings.

In Uganda, many girls use cloth, toilet paper, or sometimes nothing at all to manage menstruation due to the unaffordability or unavailability of sanitary pads (Boosey et al., 2014; Hennegan et al., 2016). Focus group discussions have shown that menstruation is often perceived with shame, and many girls choose to stay home during their periods. This stigma is reinforced by school environments that lack private toilets, functional water sources, soap, or bins for safe disposal. Fear of leakage, teasing, and embarrassment further discourages girls from attending or participating fully in class.

The consequences of poor MHM are significant: reduced school attendance, lower academic performance, and emotional distress. Girls facing repeated absenteeism fall behind in their studies, contributing to gender disparities in education and violating their rights under SDG 4 (Quality Education) and SDG 5 (Gender Equality) (UNESCO, 2021). Female teachers may also be affected, particularly in under-resourced schools where facilities do not accommodate their hygiene needs.

Infections such as urinary or reproductive tract infections are common among girls who reuse unwashed cloths or rely on unsafe materials. Beyond the physical risks, menstruation-related stigma reinforces structural gender inequality and weakens girls' sense of agency and belonging in educational spaces (Jewitt & Ryley, 2014).

Effective MHM interventions in Uganda have included the provision of affordable or reusable menstrual products, the installation of girl-friendly WASH infrastructure, and peer-led education programmes. Awareness campaigns that engage boys and male teachers have also

helped reduce stigma and foster inclusion. However, sustainable progress depends on coordinated efforts across the education, health, WASH, and gender sectors, and must be tailored to the needs and realities of each school and community.

Menstrual hygiene must be recognized not only as a hygiene issue, but as a matter of dignity, equity, and the right to education.

3.5 The importance of hygiene

Hygiene is a cornerstone of public health, historically linked to major declines in disease and mortality (Wilson, 2021). It not only prevents infections but also supports mental well-being and social interaction (Curtis & Cairncross, 2023). Simple acts like handwashing can reduce respiratory infections by 21% and diarrhoeal diseases by 40%, offering a \$4.30 return per dollar invested in low-resource settings (Jenkins et al., 2023; WHO, 2022). Comprehensive hygiene, including bathing, oral care, food safety, and waste disposal, creates a protective “hygiene shield” against pathogens (Johnson et al., 2024; Martinez & Wong, 2024). Historically, improvements like modern sewage systems had greater impacts on life expectancy than many medical advances (Thompson & Garcia, 2023). In healthcare, hand hygiene can cut infection rates by up to 50%, yet compliance often remains below 40% (Liu et al., 2023; Ramirez & Park, 2024). Culturally, hygiene shapes moral and social norms, boosting self-esteem and mental health (Reynolds, 2022).

In workplaces, hygiene reduces absenteeism and improves productivity, with benefit-to-cost ratios up to 6:1 (Anderson & Smith, 2022). The COVID-19 pandemic reaffirmed hygiene’s role in disease control, lowering transmission of SARS-CoV-2 and other respiratory infections (CDC, 2024; Liu et al., 2023).

Community hygiene programs have been especially impactful in reducing childhood illness, particularly when culturally adapted (Patel & Nguyen, 2023; WHO, 2022). However, improper use of antimicrobial products may drive resistance, highlighting the need for evidence-based hygiene promotion (Rodriguez et al., 2024). With urbanization and climate change threatening infrastructure, future efforts must integrate hygiene into broader public health and environmental strategies (Mitchell & Khan, 2024). In all contexts, hygiene remains essential for health, dignity, and resilience (Johnson et al., 2024).

3.6 Hygiene poverty and inequality

Hygiene poverty refers to the inability to afford or access basic hygiene essentials such as soap, sanitary products, clean water, toilets, and washing facilities. It encompasses both material deprivation and infrastructural exclusion, often affecting low-income families, homeless individuals, and residents of informal settlements (The Hygiene Bank, n.d.). This form of poverty undermines public health, social dignity, and equitable access to education, particularly for women and children (UNICEF, 2020). In Uganda, many families survive on less than \$1 per day, often reusing hygiene items beyond safe use or forgoing them entirely.

3.6.1 Consequences of hygiene poverty

Hygiene poverty has serious implications for physical health, mental well-being, educational attainment, and social inclusion. It intensifies existing inequalities and places vulnerable populations at greater risk of disease, stigma, and poverty traps.

Children without access to adequate hygiene are more prone to infectious diseases such as diarrhoea, respiratory illnesses, and skin infections. In slum environments where water and sanitation infrastructure are lacking, exposure to pathogens is continuous. According to the WHO (2023), inadequate water, sanitation, and hygiene (WASH) are responsible for 297,000 deaths of children under five annually from diarrhoeal diseases.

Frequent illness due to poor hygiene leads to school absenteeism and reduced academic performance. A systematic review found that school-based hygiene interventions significantly reduce infection rates and improve attendance (Saito et al., 2023). Additionally, girls lacking menstrual hygiene products often miss school during their periods, contributing to gendered educational inequalities (UNESCO, 2019).

Children who are unable to maintain personal hygiene often face bullying, social exclusion, and stigma. This can lead to low self-esteem, anxiety, and withdrawal from school or peer groups (The Hygiene Bank, n.d.). The psychosocial impacts of hygiene poverty are long-lasting, affecting a child's mental health and emotional development.

Children living in informal settlements face compounded risks due to overcrowding, open defecation, unsafe water, and poor waste management. These conditions increase the risk of waterborne and vector-borne diseases such as cholera and malaria (Ahmed et al., 2020). Long-term exposure also affects growth, cognitive development, and future opportunities (Mbuya & Humphrey, 2015).

3.6.2 Strategies to address hygiene poverty

Addressing hygiene poverty among vulnerable children in Uganda requires a multidimensional and context-sensitive approach. As a structural issue rooted in chronic poverty, limited public investment, and cultural stigma, hygiene poverty cannot be resolved by individual behaviour alone (Morgan et al., 2017). In communities such as Namuwongo, where people live in overcrowded slums and survive on less than a dollar a day, basic hygiene products like soap, sanitary pads, and toothpaste are seen as unaffordable luxuries. This leads to increased vulnerability to preventable diseases, including diarrhoea, respiratory infections, and parasitic infestations (Bartram et al., 2017; WHO, 2023).

Efforts to reduce hygiene poverty must begin with national and international policy commitments. Although hygiene is now explicitly recognized under SDG 6.2 calling for “adequate and equitable sanitation and hygiene for all by 2030” (United Nations, 2015), many national WASH strategies still focus predominantly on water and sanitation infrastructure, leaving hygiene underfunded and poorly monitored (Jiménez-Redal et al., 2018). In Uganda, there is a need to strengthen cross-sectoral coordination between the ministries of health, education, and water to ensure that hygiene promotion, particularly in schools, receives adequate attention (Hueso, 2016). Incorporating hygiene education into school curricula, training teachers, and allocating specific budgets for soap, sanitary materials, and handwashing stations are crucial steps forward (Cronk et al., 2015; WHO, 2023).

On a local level, the success of hygiene policies depends heavily on the capacity of decentralized actors. However, many local governments in Uganda lack the technical expertise and resources to implement hygiene interventions effectively (Jiménez et al., 2014). Strengthening these capacities through targeted training, infrastructure investments, and community mobilization is essential. NGOs and community-based organizations play an indispensable role here. Organizations such as UHfH, Touch the Slum, and Médecins Sans Frontières support grassroots efforts by delivering educational programs, distributing hygiene kits, and organizing awareness campaigns (Interview data, 2025; WHO, 2023). These partnerships help tailor interventions to local realities and meet the immediate needs of children and caregivers.

Sustainable behaviour change remains central to breaking the cycle of hygiene poverty. While information-based approaches have value, evidence shows that emotional drivers such as shame, nurture, and social belonging are often more effective in influencing sustained hygiene practices among children (Aunger & Curtis, 2016; Biran et al., 2014). Strategies based

on behavioural science, including storytelling, peer-led demonstrations, visual education tools, and routine reinforcement, can be transformative. During fieldwork in Uganda, children responded enthusiastically to colourful posters, songs, and hands-on activities such as soap-making or hygiene-themed games (Harrison et al., 2019; van Reeuwijk, 2003). During focus groups at UHfH, children were more engaged when shown images rather than text-heavy materials. Teachers reported increased recall and enthusiasm when songs or games were integrated into hygiene lessons. Such approaches empower children and enable them to internalize hygiene practices in an engaging, non-threatening manner.

Integrated WASH programming is also vital. Hygiene promotion cannot succeed in isolation from access to clean water and safe sanitation (Cumming et al., 2019). Many schools and community centres in Uganda still lack functioning handwashing stations or private toilets, particularly for girls (WHO/UNICEF, 2023). This exacerbates gender inequality and undermines efforts around MHM. Programs that combine the provision of physical infrastructure with education (targeting both boys and girls) create safer learning environments and reduce school absenteeism, particularly among menstruating adolescents (Boosey et al., 2014; Hennegan et al., 2016).

Affordability remains a significant barrier. Interventions must therefore prioritize low-cost, locally adapted solutions. Promoting the production and use of homemade soap, reusable sanitary pads, and hygiene posters tailored to low-literacy contexts helps increase sustainability (Saboori et al., 2016). Children should not depend on donated goods alone but rather be empowered through skills and knowledge that foster independence. Visual communication is particularly effective in multilingual or low-literacy environments, as was evident in the Namuwongo community centre where pictograms and simplified language helped young children understand core hygiene messages (Oxfam, 2023).

Finally, tackling hygiene poverty also involves engaging families and communities. Hygiene practices learned in school need to be reinforced at home, which requires the involvement of parents and guardians (Freeman et al., 2012). Culturally sensitive dialogue, home visits, and parent workshops help build a supportive environment around the child. Where possible, these efforts should be linked to broader development strategies, including vocational training and family planning, to address the intergenerational nature of poverty and poor health (McMichael, 2019; WHO, 2023).

In sum, reducing hygiene poverty in Uganda demands a holistic, child-centred strategy that connects policy, education, community action, and emotional engagement. Only by integrating infrastructure, behaviour change, affordability, and cultural understanding can

lasting improvements in hygiene behaviour be achieved, ensuring that no child is denied health, dignity, or opportunity due to a lack of soap, water, or knowledge.

3.7 The role of international hygiene days

International awareness days play a valuable role in raising awareness and promoting positive behaviour change related to health and hygiene. Within educational contexts, these globally recognized days are integrated into teaching materials and school activities to enhance engagement and reinforce key messages.

Table 2: International hygiene days

World Water Day	Highlights the critical importance of clean and safe water access	22 March
World Health Day	Emphasizes overall health and disease prevention	7 April
Menstrual Hygiene Day	Aims to break taboos surrounding menstruation and support gender equity in hygiene education	28 May
Global Handwashing Day	Draws attention to the role of hand hygiene in preventing illness	15 October
World Toilet Day	Advocates for safe sanitation as a fundamental human right	19 November

These days provide meaningful opportunities for organizing awareness campaigns, classroom discussions, creative workshops, and community events, reinforcing hygiene-related learning in an engaging and culturally relevant way.

3.8 Integration into the final product

The decision to focus on hand hygiene, body hygiene, clothing hygiene, oral hygiene, and environmental hygiene as the core components of this research was based on two main considerations. Firstly, the urgent need for improvement in these areas, as consistently observed during fieldwork in Namuwongo. Secondly, their practical feasibility within the scope of a child-friendly, low-cost, and participatory educational package.

Although MHM and sanitation (including the elimination of open defecation) are equally critical for public health, educational access, and gender equity, they were not included as formal components of the final product. This decision was made due to the broader

pedagogical and infrastructural requirements associated with these topics, which exceeded the timeframe and operational scope of this project.

Nevertheless, their relevance was acknowledged throughout the research. A dedicated awareness session and donation campaign were organized to address MHM specifically, while sanitation-related messages were integrated across educational activities and hygiene discussions to ensure a comprehensive approach.

In summary, this conceptual framework provided the theoretical and practical basis for developing a targeted hygiene education package. By combining global insights with local realities, the framework ensured that the final product addresses the most pressing hygiene challenges faced by vulnerable children and teachers in Uganda, while remaining feasible, culturally relevant, and sustainable.

4 Contextual framework

This framework situates the research within the broader historical, socio-political, economic, and cultural landscape of Uganda. Understanding the environment in which this study was conducted is essential to interpret the findings and develop a sustainable, relevant hygiene education product. The framework is structured around three levels: macro, meso, and micro.

4.1 Macro-level: national context and public health landscape

Uganda is a landlocked country in East Africa with a population of approximately 48.6 million people as of 2023, projected to increase by 76% to over 85 million by 2050 (WHO, 2025). The country has one of the youngest populations in the world: over 50% of Ugandans are under 18, and in informal settlements like Namuwongo, more than half of the residents are under the age of five (UNICEF, 2023). This rapid population growth places enormous pressure on Uganda's already overstretched systems, particularly in education, healthcare, sanitation, and water infrastructure.

4.1.1 Poverty and infrastructure deficits

Despite an average Gross Domestic Product (GDP) growth of 5.3%, poverty remains systemic and widespread. More than 42% of the population lives below the national poverty line, and Uganda ranks 159th out of 191 countries on the Human Development Index (UNDP, 2024b; World Bank, 2023). The informal economy dominates the labour market, and youth unemployment exceeds 60% (ILO, 2024). Access to basic services such as clean water, electricity, and adequate housing remains limited, particularly in rural and slum areas. These are all conditions that significantly increase the risk of hygiene-related diseases. In communities like Namuwongo, many households share pit latrines or resort to open defecation. A common practice includes defecating into plastic bags due to a lack of infrastructure, which highlights the severity of sanitation poverty.

4.1.2 Disease burden and public health gaps

Communicable diseases remain a leading cause of mortality in Uganda, largely linked to poor hygiene and sanitation. According to WHO data (2025), malaria remains the leading cause of death in the country, accounting for 43.1 deaths per 100,000 males and 34.1 among females,

followed closely by lower respiratory infections and HIV/AIDS. Pneumonia and diarrhoeal diseases also remain top causes of death, particularly among children under five (Bagenda et al., 2021; Kigozi et al., 2023).

The COVID-19 pandemic further disrupted access to routine healthcare, increasing risks for untreated HIV, malaria, and maternal complications (Bell et al., 2020). The Minister of Health, Dr. Ruth Jane Aceng, noted that malaria alone accounts for 30–40% of outpatient visits and 20% of hospital admissions, despite national campaigns free mosquito net distribution, indoor residual spraying, and pilot vaccination programs (NTV Uganda, 2025). These efforts are often undermined by limited public awareness and inconsistent compliance.

4.1.3 WASH inequity and policy gaps

WASH stands for Water, Sanitation, and Hygiene. It is a public health approach focused on providing clean water, safe sanitation (e.g., toilets, latrines), and hygiene education such as handwashing with soap. Inadequate WASH services contribute to preventable illnesses like diarrhoea, cholera, typhoid, and parasitic infections (Mbonye, 2004; WHO, 2023). In Uganda, only 19% of the population had access to safely managed drinking water in 2022, and 18% had access to safely managed sanitation. Just 31% had access to basic handwashing facilities with soap and water had home (WHO, 2023). Mortality attributed to unsafe WASH services stood at 28.1 deaths per 100,000 people in 2019 (WHO, 2023). In schools, 45% lack handwashing facilities, and hygiene education is often inadequate or absent (WHO/UNICEF, 2023).

Programs such as the National Sanitation and Hygiene Improvement Framework (NSHIF) exist but suffer from poor implementation and chronic underfunding (WHO, 2023). Residents of slums, particularly in places like Namuwongo, are victims of these inequalities, where households depend on unsafe water sources and land solid waste management systems. Research shows that community-led efforts using visual aids and participatory learning methods are more effective than top-down campaigns (Dickson-Gomez et al., 2023; Harrison et al., 2019).

4.1.4 Neglected domains: oral and menstrual hygiene

Oral health is often neglected in discussions about hygiene. Studies show that 32.5% of Ugandan children and 66.7% of adults suffer from untreated dental caries (UDA, 2024). Dental

hygiene problems such as bleeding gums and calculus buildup appear as early as childhood (Muwazi et al., 2005). Studies show that 88% of caries in children are not treated. These issues impact nutrition, speech development, and school participation, yet oral care receives little attention in public health planning.

Menstrual health and hygiene management (MHHM) is another critically under-addressed issue. Poor access to sanitary products, lack of privacy, and misinformation lead to school absenteeism and health problems among girls (Boosey et al., 2014; Plan International, 2023). Studies have shown that up to 10% of girls drop out of school due to menstruation-related challenges (Plan International, 2023). This affects not only their health, but also their learning outcomes and future prospects. Gender inequality is thus indirectly reinforced by structural deficits in hygiene. Shame and lack of support make it difficult for girls to wash reusable pads or manage menstruation hygienically, which can lead to infections. MHHM is rarely included in national health or education plans, despite its relevance to SDG 4 (Quality Education) and SDG 6 (Clean Water and Sanitation) (WHO, 2023).

4.1.5 Structural and systemic barriers

Uganda's health sector is under-resourced. In 2021, public health expenditure accounted for just 4.67% of GDP (WHO, 2023). There were only 1.91 doctors, 22.6 nurses, and 0.11 dentists per 10,000 people. Aid for health research and infrastructure remains low, with only \$7.03 per capita in development assistance in 2022 (WHO, 2023).

Efforts like the Vision 2040 strategy, Parish Development Model, and WASH SDG programmes signal national commitment, but many are fragmented and donor dependent. Corruption, limited decentralization, and climate vulnerability (e.g., floods contaminating water supplies) hinder long-term improvements (Mkandawire, 2001; Transparency International, 2023).

4.1.6 Cultural norms and behaviour change barriers

Hygiene practices are influenced by cultural norms and taboos. In many families, discussions around menstruation or personal hygiene are considered inappropriate, leaving children uninformed. During interviews in Namuwongo, residents reported that handwashing, cough hygiene, and even brushing teeth are rarely reinforced outside of crises like cholera outbreaks.

Moreover, public health promotion and hygiene education are often treated as secondary priorities in Uganda's WASH strategies. National programs tend to focus on infrastructure (such as latrines and water points) while underemphasizing long-term behaviour change, awareness, and especially child-centred hygiene education (Bartram et al., 2017; Morgan et al., 2017). In some communities, hygiene is still perceived as a luxury or disconnected from health outcomes. Informal interviews with teachers and parents revealed that practices like handwashing or brushing teeth are often viewed as unimportant, highlighting the urgent need for culturally appropriate, visual, and participatory education methods (Oxfam, 2023).

This context directly informed the design of my final product, which explicitly focuses on accessible, child-friendly hygiene education. By using creative and engaging tools tailored to the local context, the project aims to fill this gap and promote sustained behavioural change among young children.

4.1.7 Macro-level relevance to research design

The cumulative effect of Uganda's demographic pressure, underfunded health infrastructure, cultural taboos, and persistent public health challenges directly shaped the scope and objectives of this research. These macro-level barriers demonstrated that hygiene is not merely an individual or behavioural issue, but a systemic challenge rooted in socio-economic, political, and cultural structures.

As such, the final hygiene education product is designed to be child-friendly, low-cost, and participatory, responding to infrastructural limitations, low literacy levels, and behavioural stigma. This approach aligns with Uganda's national development goals and its commitments to the SDGs:

- **SDG 3:** Ensure healthy lives through disease prevention.
- **SDG 4:** Improve educational outcomes by reducing hygiene-related absenteeism.
- **SDG 6:** Achieve universal access to water and sanitation.

By combining infrastructure awareness, community engagement, and visual education strategies, the intervention aims to empower children and teachers in low-resource settings and contribute to more inclusive and sustainable hygiene practices.

4.2 Meso-level: organizational context

4.2.1 General objectives

During my six months internship in Uganda, I worked in the organisation Uganda Hands for Hope (UHfH). This non-profit, child-centred organisation is based in Muyenga, bordering Namuwongo. The founder of UHfH is Joe Cummiskey who is active in Kampala since 2008. UHfH was created with the aim to alleviate extreme poverty and foster sustainable development among the most vulnerable children and families living in Namuwongo. The organization began by helping just nine children and now reaches over 350 beneficiaries through a range of integrated programs. UHfH's work is deeply rooted in community engagement, and its vision is to ensure that no child under six in Uganda lacks basic nutrition, healthcare, sanitation, or education. UHfH provides comprehensive support to children and families through early childhood and primary and secondary education. This includes school supplies, uniforms, and transportation. The organization also offers health, nutrition, and social care services such as medical check-ups, deworming, and mental health support. Enrolled children receive two nutritious meals per day and access to safe drinking water. In addition, UHfH facilitates extracurricular activities like sports, music, and life skills training. For older youth and parents, alternative education and livelihood programs are available, including vocational training, small business loans, and financial literacy education.

In November 2024, UHfH expanded its outreach by opening a community centre next to the Nakivubo river in Namuwongo. This centre serves as a safe haven for extremely vulnerable children (many under five, including babies) who may not be enrolled in school due to home circumstances. Each weekday morning from 10:00 a.m. to 12:00 p.m., the centre offers children a cup of porridge, basic English and life skills education, games, singing, drawing... The program is entirely free and targets children who would otherwise remain isolated at home in dangerous, unsanitary conditions. Although the community centre is still in its early stages, UHfH aims to expand it significantly over time. It represents a critical intervention in early childhood care, nutrition, and hygiene education in one of Uganda's most underserved urban communities.

4.2.2 Namuwongo: local context of vulnerability and need

Namuwongo is the second largest informal settlements in Kampala, the national capital of Uganda. This slum is located in the Makindye Division, an administrative area in the southeast of the city, and a home to over 30.000 residents. More than 50% of Namuwongo's population

are children. The settlement sprawls across disused swamp land along a deteriorating railway line, in the industrial zone of the city. Its geographic location makes it highly vulnerable to seasonal flooding, which frequently leads to contaminated water supplies, overflowing sewage, heightened risk of waterborne diseases, and even deaths.

The majority of Namuwongo's residents live in extreme poverty. Multiple people often survive on less than one dollar per day, living in overcrowded and makeshift homes constructed from mud bricks, timber, and corrugated iron sheets. Contrary to public assumptions, housing in Namuwongo is not free: families rent these dwellings from local landlords, creating a cruel dilemma, whether to pay for shelter or food.

The population is highly diverse and includes orphans, widows, refugees from Northern Uganda, South Sudan, and the Democratic Republic of Congo, and low-income Ugandan nationals who migrated to the city in search of opportunity. Socially, the community faces deeply embedded challenges: high unemployment, food insecurity, inadequate access to education and health services, and significant public health threats. Diseases such as HIV/AIDS, malaria, tuberculosis, typhoid, dysentery, and cholera are common. In addition, the prevalence of teenage pregnancies, sexual violence, and child-headed households underscores the fragility of family structures and social safety nets.

In this complex and precarious environment, basic hygiene is a daily struggle. Open defecation, poor waste disposal, and limited water access are part of daily life. Soap is rarely available, and structured hygiene practices are difficult to maintain, especially among young children and infants. Despite these conditions, many residents are unaware of or desensitized to hygiene risks, due to a combination of cultural beliefs, economic necessity, and lack of education.



Figure 2: image of Namuwongo with flying toilets



Figure 3: Nakivubo river in Namuwongo

Other organizations consulted during the fieldwork include Touch the Slum, Work of Hope Foundation, African Youth Development Link, and Kidiki Secondary School. While many of these NGOs recognize hygiene as a critical issue, most lack structured teaching materials adapted to children's literacy levels, especially in slum areas.

Additional insights were gathered from other local NGOs, including Touch the Slum and Work of Hope Foundation, which confirmed that hygiene education is underdeveloped in urban informal settlements. Most organisations lack structured, child-friendly teaching materials. Cultural norms and funding limitations were identified as major obstacles. These meso-level dynamics directly informed the design of the educational product, prioritising feasibility, adaptability, and impact within under-resourced educational settings.

Uganda Hands for Hope (UHfH) staff and volunteers frequently encounter children whose basic hygiene needs are unmet. During daily activities at both the school and community centre, educators observed that some children arrived with visible skin infections, unbrushed teeth, and unwashed clothes. For many families, soap and toothpaste are unaffordable, and access to private washing facilities is limited or non-existent. One social worker recounted how a child refused to participate in group games due to body odour and embarrassment, which reflects the social exclusion hygiene poverty can cause.

At the UHfH community centre, children under five are especially vulnerable. Several caregivers admitted during informal interviews that they use water only for cooking and drinking, not for handwashing or bathing, due to scarcity or cost. The centre's morning routine (providing porridge, songs, and life skills) is often the only structured and safe environment these children experience in a given day. For UHfH staff, it became clear that targeted hygiene education was urgently needed not only to reduce illness but also to foster confidence and participation among children.

These observations guided the development of this bachelor thesis. They demonstrated that even small, low-cost educational interventions (when made accessible, child-friendly, and culturally appropriate) can have a significant impact on the well-being and dignity of vulnerable children.

4.3 Micro-level

At the micro level or the personal level, this research focuses on the real-life experiences of children in two very different Ugandan communities:

- Namuwongo (urban slum in Kampala)
- Namwendwa (rural village in Kamuli district)

In both settings, children demonstrated a lack of hygiene awareness and poor access to materials such as soap, toothbrushes, or sanitary pads. Some children interviewed in Namuwongo had never brushed their teeth, while girls in Namwendwa boarding schools reported owning only two or three pairs of underwear and using rags during menstruation.

Teachers often lacked both the knowledge and the tools to educate their students about hygiene. In many cases, even teachers did not model basic hygiene behaviours themselves. For example, handwashing before meals was not practiced by most children or by school staff. Additionally, when children became sick or sustained injuries, there was a noticeable delay or absence of appropriate action due to a general lack of first aid knowledge and health awareness among caregivers and educators.

In some cases, hygiene workshops were held only once per term or not at all. Shame, stigma, and a lack of culturally sensitive materials hindered open conversations about topics like body odor, menstruation, or toilet use.

Despite these barriers, children responded positively to visual and interactive methods such as stickers, pictograms, songs, and posters. This reinforces the findings by Harrison et al. (2019), who show that visual educational tools are highly effective in low-literacy environments, especially when co-developed with community members.

This micro-level analysis underscores the urgency of practical, age-appropriate, and consistent hygiene education, and confirms the relevance of this project's objective: to develop a tailored hygiene training package that children and teachers can understand, use, and sustain.

During fieldwork at the Namuwongo community centre, hygiene poverty was clearly visible in the daily lives of children. Several children reported that they had never brushed their teeth, while others shared a single piece of soap among entire families. Some children came to the centre wearing visibly unwashed clothes or with untreated skin infections, which often led to teasing or withdrawal from group activities. Girls expressed shame around menstruation, citing a lack of sanitary products and privacy at home.

These examples illustrate that hygiene poverty in Namuwongo is not an abstract concept but a lived, daily reality. It affects children's health, confidence, social participation, and educational engagement. Teachers and caregivers confirmed that the lack of hygiene materials often forced children to miss school or avoid peer interaction altogether. These

findings reinforce the urgent need for low-cost, visual, and participatory hygiene education tools, which formed the basis of this research project.

4.3.1 Case study A

A glimpse into hygiene realities in Namuwongo: The story of a 13-year-old boy

During a fieldwork session at the UHfH community centre in Namuwongo, I met a 13-year-old boy named “D”. Over the course of several weeks, I built a personal rapport with him through play and informal conversations. With the help of a local teacher who translated between Luganda and English, I conducted a more in-depth, semi-structured interview with D as part of a focus group discussion on basic hygiene practices.

At the outset of the conversation, D offered responses that were evidently shaped by social desirability. When asked about daily hygiene habits, such as how often he washed, he confidently replied “minimum at least three times a day”. However, his outward appearance and clothing told a different story: his clothes were torn and unchanged, and his legs and feet were visibly soiled. These contradictions hinted at deeper layers of shame and fear of judgment.

Over time, as trust grew between us, D began to open up. One of the most striking revelations was that he had never brushed his teeth, not once in his life. At thirteen, he was unaware of the importance of oral hygiene. This pointed not only to a lack of access to basic hygiene resources such as toothbrushes and toothpaste, but also to a severe deficit in health education.

D lives with seven other children, all cared for by their ailing grandmother. Their home, which also functioned as a small charcoal-selling space, was destroyed during severe flooding. Since then, the family has lost everything. Their daily reality is marked by poverty so profound that hygiene becomes secondary to survival. I first recognized D and his siblings late one night, around 11:00 PM, selling bananas by the roadside, his younger sister was only four years old. It was a dangerous setting, yet for them, a necessary means to obtain food.

D and his siblings do not attend formal school. Their only educational exposure comes from the community centre, where they receive one cup of porridge a day, some basic English lessons, and occasional life-skills training, including the hygiene sessions I facilitated. They own no soap, no towels, and have extremely limited access to clean water. When asked about handwashing habits, most children struggled to answer, simply because these practices were not part of their lived reality.

During one of my visits, I had to take D to a local health clinic due to a severe burn wound on his leg. He was largely unaware of the need to keep the wound clean and properly

dressed. Despite his age, he had little understanding of basic first aid or self-care. This case made evident the extreme gap not just in material resources, but also in knowledge and consistent care.

D owns only one pair of underwear. When families in similar situations receive donated hygiene products, such as toothbrushes or toothpaste, these are often sold in local markets for a few coins to buy food. This illustrates the harsh trade-offs these families face between immediate survival and long-term well-being.

Another critical aspect of D's daily life involves access to sanitation. Even the most basic toilet facilities in Namuwongo come at a financial cost, often a few hundred shillings per visit. These facilities are rudimentary at best: little more than unsanitary holes in the ground, heavily contaminated and poorly maintained. For families like D's, even this minimal fee is unaffordable. As a result, many children resort to the practice known locally as the "flying toilet", defecating into plastic bags and discarding them along the roadside or near water sources such as the riverbanks. This practice, while born out of necessity, carries significant public health risks, including the spread of waterborne diseases and environmental contamination. It underscores the harsh reality that without safe, accessible, and affordable sanitation, the concept of hygiene remains unattainable, and efforts at behavioural change cannot succeed in isolation from systemic infrastructural support.

There is a pervasive sense of shame surrounding hygiene-related discussions in this community. Children like D often express feelings of embarrassment, social exclusion, and a lack of self-confidence. Self-care becomes a luxury, and social participation is hindered by visible signs of neglect, unwashed clothes, untreated skin conditions, and poor dental health. For many families, the loss of a child under the age of five is not an anomaly but a painful, normalized reality.

This case underlines the intricate relationship between poverty, knowledge, and dignity in the context of hygiene. It exemplifies how systemic issues ranging from structural poverty and flooding to lack of education, intersect with deeply personal experiences. It also highlights the critical importance of culturally sensitive, trust-based approaches when conducting research in vulnerable communities.



Figure 4: D. in local health clinic



Figure 5: remains of house D.

4.3.2 Case study B

Menstrual poverty and educational exclusion: The story of a 16-year-old girl

During a conversation held as part of a holiday school program at UHfH, I met a 16-year-old girl whose story illustrates the intersection between menstrual hygiene, education, and gender-based stigma. The conversation began when she asked for clarification about a phrase in a reading text “sexual education” which prompted a broader dialogue about menstruation and reproductive health. This exchange revealed a complex web of misinformation, fear, and practical barriers that many girls in her situation face.

Although the school offers occasional reproductive health sessions, often facilitated by NGOs such as Girl Up, these are infrequent and inconsistently attended. Furthermore, the classroom context makes targeted education difficult, as students vary widely in age, not according to grade level, but based on when they are able to secure a sponsor to fund their education. As a result, many girls, including the one I interviewed, receive fragmented, one-time instruction, with no consistent follow-up.

She shared that both boys and girls at her school have very limited knowledge about menstruation. The lack of understanding among boys often leads to ridicule and bullying, which exacerbates the feelings of shame and isolation experienced by menstruating girls. Some of her classmates have dropped out of school entirely, unable to cope with the embarrassment and practical difficulties of managing their periods in a school environment lacking privacy, clean facilities, or menstrual products.

The girl explained that she and her peers rarely have access to sanitary pads, either disposable or reusable. If pads are distributed by an NGO, it may only happen once per

year. Even when reusable pads are available, the absence of soap, clean water, and private drying areas makes it nearly impossible to maintain hygienic practices. Reusable materials must be washed and dried thoroughly to avoid bacterial infections, but the stigma attached to menstruation makes it difficult to hang them out to dry without shame or fear of being seen. Many girls resort to using scrap cloth, paper, cardboard, or even plant material inside their underwear. These are solutions that often lead to severe rashes, infections, and discomfort.

She also mentioned the constant fear of staining her clothes while at school. Most girls own only one school uniform, and if they soil it, there are no options for changing or discreet cleaning. The result is that many girls choose to stay home during their menstrual periods, missing multiple days of school each month. Over time, this contributes significantly to falling behind in lessons and eventual school dropout.

Her story is not unique, but emblematic of a broader issue: menstrual poverty, the lack of access to safe, hygienic menstrual products, education, and supportive environments. Without privacy, without supplies, and without knowledge, many girls face avoidable health risks and are systematically excluded from education. This case highlights the urgent need for accessible, affordable menstrual hygiene products, gender-sensitive health education, and infrastructural improvements in school sanitation facilities. It also underlines the importance of involving both girls and boys in comprehensive, age-appropriate education to reduce stigma and promote dignity.



Figure 6: menstruation period among girls in normal at Kidiki SS

5 Methodology

When I travelled to Uganda for a six-month internship, I initially expected to contribute through my background in economics and international development. Conducting research on public health was not part of my original plan. However, a series of deeply impactful events during my early weeks in Uganda significantly shifted my focus. This happened both within my internship at UHfH and simply by walking on the streets of Kampala. I was confronted with the visible and often heartbreaking consequences of hygiene poverty.

In early December, a four-year-old child enrolled at our school passed away due to untreated tuberculosis. Around that same period, I accompanied several children and community members to local clinics for infections, wounds, and illnesses that were entirely preventable with basic hygiene or first aid. These moments, whether experienced through my professional role or personal encounters in daily life, left a deep impression. What struck me was not only the medical vulnerability of many children, but also how normalised this vulnerability had become.

As I spent more time at the school and the newly opened community centre, I engaged in countless conversations with teachers, caregivers, social workers, and children themselves. Through these interactions, I began to understand how deeply hygiene poverty affected not just physical health, but also school participation, self-esteem, and dignity. The urgency of the issue became undeniable, and I found myself increasingly drawn to it, not just emotionally, but as a researcher.

This turning point led me to formulate new research questions rooted in these lived realities. I wanted to understand what the daily hygiene challenges are, faced by vulnerable children living in extreme poverty. Motivated by this pressing need, I developed the following research question: *“How can low-cost, participatory, and educational hygiene interventions improve basic hygiene practices among vulnerable children and adolescents in Namuwongo, Uganda?”*. To support this research question, some following sub-questions were formulated. First, *“What is the importance of basic hygiene education in Namuwongo, Uganda?”*. Second, *“What are the basic hygiene needs of vulnerable children living in this community?”*. And finally, *“How can we provide adequate and sustainable hygiene education for these children, considering their social and economic context?”*.

In what follows, this methodology chapter explains how this research was designed and carried out, why certain methods were chosen, who participated, and how the process unfolded (both practically and ethically) within the dynamic and often complex environment

realities of Namuwongo and Kamuli. This chapter begins with an overview of the research methods and data collection process that informed the development of the product. It then outlines the data analysis and the subsequent design and adaptation of the final product. The chapter concludes with a critical reflection on the methodological process, including its challenges, limitations, and ethical considerations.

5.1 Data collection

This study employed a qualitative, participatory methodology to explore hygiene-related challenges among vulnerable children in Uganda, focusing specifically on the communities of Namuwongo and Kamuli. The research was conducted over a six-month period during a field-based internship at UHfH, a non-profit organisation working with children in extreme poverty. The methodological approach was designed to combine scientific rigor with practical relevance, using multiple qualitative tools to gather deep insights from local actors and settings.

The research participants included children aged between 3 and 16 years, schoolteachers, caregivers, UHfH staff, and representatives from several NGOs. Participants were chosen through purposive sampling, ensuring diversity in age, gender, and background while prioritizing voices directly affected by hygiene poverty. Adolescents, particularly girls, were intentionally included given their heightened vulnerability related to MHM.

The research utilized a combination of qualitative methods. These included participant observation, literature study, unstructured in-depth interviews, semi-structured in-depth interviews, focus group discussions, creative workshops, anonymous surveys, and informal conversations. Daily participant observation at the school and community centre provided direct insight into children's hygiene behaviours, the availability and condition of sanitary facilities, and routine interactions related to hygiene. This method was supplemented by reflective field notes kept throughout the internship.

5.1.1 Literature study

To inform and frame this research, a comprehensive literature review was conducted at the outset. This review aimed to clarify key concepts such as hygiene poverty, behavioural change communication, participatory education, and WASH (Water, Sanitation and Hygiene) interventions in low-income settings. Specific attention was given to sub-Saharan Africa, and Uganda in particular, using sources from WHO, UNICEF, Ministry of Health Uganda, and peer-reviewed studies.

The literature informed the construction of the conceptual framework, which defined hygiene as a multidimensional issue affecting health, education, and social well-being. It also highlighted structural inequalities in access to WASH resources and the role of community-based and school-based interventions in addressing hygiene behaviours.

A contextual framework was developed to apply this knowledge to the Ugandan setting. The macro-level focused on national WASH infrastructure, health policy, and SDG commitments. The meso-level examined the role of local NGOs, particularly UHfH, in hygiene service delivery and education. The micro-level explored children's lived realities and barriers to daily hygiene practices. Together, these layers guided the design and delivery of the research.

The literature study formed a foundation for this research, offering both theoretical grounding and practical direction. By combining insights from the conceptual and contextual frameworks, it became possible to identify existing knowledge gaps, relevant behavioural change models, and best practices in hygiene education. These insights directly informed the development of the educational booklet and the accompanying sessions, ensuring that the final materials were not only evidence-based, but also contextually relevant, culturally sensitive, and responsive to the specific needs and contexts of the target audience in Uganda.

5.1.2 Participant observation and informal conversations

The initial phase of the research involved participant observation and informal interviews with teachers, social workers, and children. Throughout the six-month internship, the data collection took place in three main locations: UHfH's school in Muyenga (which enrolls the most vulnerable children from Namuwongo), the newly established community centre within Namuwongo slum itself, and a rural school setting in Kamuli district. These locations were selected for their contrasting socio-geographical profiles and their relevance to hygiene-related public health concerns.

This method allowed for real-time observation of hygiene behaviours, resource availability, and cultural norms surrounding hygiene, cleanliness and caregiving. I kept daily field notes, recording situations such as children arriving with unwashed clothes, skin infections, or untreated injuries. I also noted infrastructural conditions such as the presence or absence of functioning toilets and handwashing stations. Additionally, school routines were closely observed, including hygiene practices among staff and students, such as the absence of handwashing before meals. These findings offered vital context and helped shape the direction of the research and the design of the final educational tools.

In addition to structured observation, informal conversations with children, teachers, and community members played a crucial role in shaping my understanding of hygiene-related challenges. These spontaneous interactions often occurred outside formal settings, during lunch breaks, playtime, or while preparing materials with local staff. They provided rich, candid insights into daily experiences and perceptions of hygiene. For example, children would casually mention why they didn't wash their hands or how they shared a toothbrush with siblings, while teachers sometimes expressed frustration about the lack of soap or their limited training in hygiene education. Such moments, though unplanned, allowed for deeper exploration of sensitive topics like shame, stigma, and the practical realities families face. These insights were consistently documented in my field notes and became invaluable in identifying the emotional and social barriers to hygiene practices. They also directly informed the development of my final educational tools, ensuring that the materials were not only age-appropriate and engaging, but also responsive to the lived realities and cultural contexts of the children and caregivers involved.

5.1.3 Unstructured in-depth interviews

To gain a deeper understanding of hygiene practices, challenges, and perceptions in Uganda, unstructured in-depth interviews were conducted with ten participants, including children, caregivers, educators, NGO staff, and a healthcare worker. This qualitative method, characterised by its open-ended and flexible format, was particularly well-suited for exploring sensitive topics such as personal hygiene, menstruation, shame, and care practices. It allowed interviewees to speak freely and reflectively, without the pressure of structured questioning. This format was especially helpful in creating a safe and trusting atmosphere, where participants felt more comfortable to share their honest perspectives.



*Figure 7: unstructured in-depth interview
community centre UHfH*

The first unstructured interview was conducted with three children at the UHfH community centre in Namuwongo. They were interviewed together, as they explicitly preferred a group setting, which felt safer and more comfortable for them. With the help of teacher Emma, who acted as a Luganda-English interpreter, the conversation revealed significant gaps in hygiene awareness. The children spoke openly about challenges they faced, such as the lack of

underwear, poor access to oral hygiene products, and limited understanding of clothing hygiene. These insights were critical in shaping the educational content, and directly

contributed to decisions such as including oral hygiene and providing donated items like toothbrushes, toothpaste, reusable menstrual pads, diapers, and underwear.

A second group of interviews took place with three school-going children from UHfH's school in Muyenga. While the setting there might appear more structured and resourced, the children interviewed also live in Namuwongo and shared similar vulnerabilities. These conversations highlighted that even in more formal educational environments, knowledge about basic hygiene is limited, and assumptions about children's understanding are often misplaced. The students shared personal experiences that revealed their own struggles with hygiene, further confirming the need for accessible and practical hygiene education.

An interview with Felicita, a female social worker at UHfH who regularly delivers hygiene sessions, provided professional insight into the ongoing challenges she encounters in her work. As she will continue delivering these sessions after the project ends, understanding her perspective was essential for ensuring that the materials developed aligned with real, observed needs and could be sustainably integrated into existing programming.

Additional interviews were conducted with a single mother living in Namuwongo and midwife Diane from Family Centre Amani. Diane's centre provides free maternal and general healthcare to the community of Namuwongo, and her extensive frontline experience offered invaluable accounts of hygiene-related challenges, especially for women and young children. Her insights on common health issues linked to poor hygiene reinforced the importance of including maternal and newborn hygiene elements in the final product.

Lastly, a representative Malaika from Skills for Change, an NGO offering tailoring classes to vulnerable girls in Namuwongo, shared her experiences supporting young women. The organization had donated reusable menstrual pads and diapers to support community hygiene needs. Her input helped contextualize the importance of locally made, reusable solutions and the role of skills-based empowerment in addressing hygiene poverty sustainably.

These interviews focused on individual experiences with hygiene in daily life, emotional associations with cleanliness, and access to resources such as soap, water, menstrual products, and toilets. In conversations with the children at the community centre, the group format was chosen because it created a safer and more relaxed environment for them. The interpreter was essential in facilitating communication and ensuring the children's expressions were captured accurately.

All interviews lasted at least 30 minutes and were conducted in quiet, familiar settings to promote comfort and confidentiality. Before each interview, verbal consent was obtained from participants, and the purpose of the conversation was explained. In some cases, interviews were audio-recorded with explicit permission. Participants were informed that they could skip any question or stop the interview at any time without consequence. This ethical approach was upheld throughout the entire research process.

The unstructured nature of these conversations led to important insights that might not have surfaced in a more rigid interview format. For example, some children only spoke about personal hygiene struggles after a period of casual interaction. These conversations provided critical input for the development of culturally sensitive and emotionally aware educational materials, ensuring the final product was grounded in the lived experiences of children and caregivers.

5.1.4 Semi-structured in-depth interviews

In addition to unstructured interviews, seven semi-structured in-depth interviews were conducted with stakeholders from NGOs and the education sector. This method uses a predefined set of open-ended questions to maintain consistency across interviews, while still offering flexibility for participants to elaborate or introduce new themes. It was particularly suitable for collecting feedback on systemic issues, community-based strategies, and the practical implementation of hygiene education in schools and local organizations.

One of the first interviews was conducted with David, the project head at UHfH. He emphasized the often-overlooked issue of waste management, particularly in slum areas like Namuwongo, and underlined the importance of integrating waste-related content into hygiene education. His observations helped broaden the scope of the educational materials to include waste handling as part of daily hygiene practices. Similarly, UHfH's founder, Joe, reflected on past hygiene-related efforts within the organization. While some initiatives had been implemented before, he pointed out the difficulty in maintaining long-term engagement among both students and teachers. This highlighted the need for durable and sustainable tools that could remain relevant and visible over time.

Ronald, from Touch the Slum (a partner organization of UHfH), shared his experience collaborating with Plan International on hygiene promotion. His feedback inspired the idea to use stickers rather than flyers, based on the observation that paper-based materials often end up discarded on the ground. This input directly informed the design strategy for more practical and lasting awareness tools (see Appendix B for transcript).

Additional interviews with Roberts from African Youth Development Link (AYDEL) and Daniel (Walk of Hope Foundation) added further context. Daniel explained how their organization supports residents in Kosovo, another slum area in Kampala, and organizes community clean-up days focused on waste management. Their community-based approach highlighted the importance of engaging local residents and young people in practical, action-oriented hygiene campaigns.



*Figure 8: semi-structured in-depth interview
Daniel Walk of Hope Foundation*



*Figure 9: semi-structured in-depth
interview teacher Resty Kidiki SS*

Finally, semi-structured interviews were conducted with two teachers from Kidiki Secondary School in Namwendwa, Kamuli district. These interviews with teacher Resty and teacher Michael offered valuable comparisons between urban and rural hygiene contexts. Teacher Resty, who also serves as the women's representative at the school, provided critical insights into the challenges surrounding menstrual health and the importance of gender-sensitive education strategies (see Appendix C). Her dual role as educator and coordinator for girls' welfare made her an ideal source of insight into school-based hygiene needs.

Unfortunately, I was unable to interview the staff member responsible for boys' hygiene, who was absent during my visit. It was also noted that, due to cultural and religious sensitivities, my presence as a female researcher may have influenced the willingness of male staff to engage in such discussions.

Each interview lasted approximately 30 to 45 minutes and followed an interview guide focusing on hygiene-related challenges in their respective contexts, existing programs, observed behaviour patterns among children and families, and recommendations for educational interventions. All participants gave verbal consent to participate, and the ethical considerations outlined above were equally applied here.

This format ensured a balanced approach: it allowed for targeted questioning on hygiene practices and institutional constraints, while also leaving room for unanticipated yet relevant insights. Such as gender-specific hygiene needs in slums, emotional stigma surrounding cleanliness, or practical challenges in distributing materials.

The combination of structured guidance and conversational space enabled me to gather rich, contextualised data that directly informed the design and content of my final educational tools. Interviewees frequently shared best practices and challenges in their work, which helped validate and refine key choices in layout, content tone, language accessibility, and visual elements of the material.

5.1.5 Focus group discussion and anonymous surveys



*Figure 10: anonymous hygiene survey
Kidiki SS*

A focus group was held with adolescent girls (S4 class) from Kidiki Secondary School (SS) in Namwendwa, Kamuli. The session included discussions and activities around menstrual health, privacy, access to products, and school infrastructure. An anonymous hygiene survey (Figure 10) was also distributed to some students that lived in the boarding school, to gain candid insights into hygiene habits and knowledge.

A second focus group was held with younger children at the UHfH community centre in Namuwongo. Participatory techniques such as drawing, ranking exercises, and storytelling were used to encourage open conversation and creativity.

5.1.6 Educational sessions and product testing

Several hygiene sessions were conducted or observed. These included a hygiene lesson by a teacher at UHfH, a hygiene session led by Felicita and me at UHfH, and a donation-based session at the community centre together with Aromo Procedure and teacher Emma. Children participated in practical workshops on soap-making, oral care, and proper handwashing. These activities functioned both as interventions and feedback mechanisms for refining the final educational materials.



Figure 11: soap-making

5.1.7 Ethical considerations

All research activities adhered to ethical guidelines to ensure the safety, dignity, and autonomy of all participants. Verbal informed consent was obtained from every interviewee prior to data collection, and participants were informed of their right to skip questions or withdraw at any time without consequence. When working with children, all sessions were conducted in the presence of staff members or caregivers to ensure a protective environment. Audio recordings were made only with explicit permission, and no personally

identifiable information was collected or published. Ethical approval for the research was discussed and confirmed in consultation with the leadership of UHfH before the start of data collection.

5.2 Data analysis

To analyse the data collected, I used the themes from my sub-questions as a guide to identify recurring patterns in the interviews. The themes from the sub-questions, which focused on current levels of knowledge and understanding about menstrual health and key challenges in basic hygiene, served as the basis for examining the interviews. Building on the theoretical insights from the conceptual framework, I analysed the interviews through a structured and critical lens. The key themes analysed were integrated with insights from the literature review to formulate a detailed answer to the research question. From the analysis, key challenges emerged and practical recommendations were made for improving basic hygiene education and access in Uganda.

The analysis of the collected data was carried out using a qualitative, thematic approach. This method allowed for the identification of recurring patterns and meaningful categories across interviews, field notes, participatory observations, and creative workshop outcomes. Building on the theoretical insights provided by the conceptual framework (which drew from behavioural change models and hygiene poverty literature), the data were analysed through a structured yet context-sensitive lens. The contextual framework was based on the lived realities of children and families in Uganda, particularly in Namuwongo and Kamuli. This framework was essential in interpreting the findings, ensuring that the analysis remained grounded and locally relevant.

An inductive coding process was used, meaning that initial codes were developed directly from the data rather than imposed in advance. Interview transcripts, observation notes, informal conversation summaries, and documentation from participatory sessions were read multiple times, and keywords, repeated concerns, and emotional responses were highlighted. These open codes were then grouped into broader themes, many of which aligned with the research sub-questions. Core themes included:

- Basic hygiene practices and gaps (handwashing, oral care, clothing hygiene)
- Menstrual health and hygiene, stigma, and gender disparities
- Infrastructure and environmental challenges (lack of toilets, water points, soap)
- Attitudes and emotional responses (shame, pride, confusion, fear)
- Role of education and caregivers (teachers' knowledge, parents' involvement)

- Preferences for visual and participatory learning tools

Triangulation was applied to increase validity. For example, self-reported practices during interviews were compared with observed behaviour during school routines and informal moments. Similarly, feedback from adult stakeholders (e.g. teachers, NGO workers) was cross-checked with that of children to identify inconsistencies or confirm shared perspectives. Importantly, the participatory nature of the methods (such as creative workshops and informal dialogue) enabled the capture of emotional and social dimensions of hygiene that might otherwise remain hidden in formal interviews. These included children's fears of being bullied for being "dirty", the normalisation of not owning a toothbrush, or the silence around menstruation in co-educational settings.

The insights gained through this analysis directly informed the content, tone, and visual design of the educational tools that were developed. For instance, limited awareness around oral and clothing hygiene led to the inclusion of specific poster visuals and vocabulary sections, while teachers' emphasis on routine supported the integration of repetition-based learning aids. The strong preference for simple visual materials, confirmed through multiple sources, led to the decision to prioritise pictograms over complex illustrations or text-heavy formats.

In sum, the analysis process was iterative, participatory, and grounded in both theory and context. It allowed for the development of educational materials that were not only evidence-informed, but also emotionally resonant and culturally appropriate for the target audience.

5.3 Critical reflection

As a white, Western female researcher with a background in international development and economics, I entered the research field in Uganda fully aware of my outsider status. My identity, values, and positionality inevitably shaped both the research process and how participants perceived and interacted with me. Acknowledging this dynamic was particularly important in studying sensitive topics such as hygiene, menstruation, and poverty, issues deeply intertwined with culture, gender, and power.

During my six-month internship at UHfH, I gradually transitioned from outsider to a more integrated participant in daily school and community life. Living with a Ugandan host family, learning basic Luganda, and participating in everyday school routines helped me build trust with teachers, children, and caregivers. This immersion improved the quality of data

collection and enabled more open conversations, especially during informal interviews and participatory sessions.

However, limitations and challenges remained. I was acutely aware that some participants (particularly male staff members and boys) might have felt uncomfortable discussing hygiene issues with a female, foreign researcher. Cultural and religious norms often led to gender segregation in hygiene sessions, making it difficult to access the perspectives of boys and male teachers. For example, I had hoped to interview the male staff member responsible for boys' hygiene at a rural school, but he was absent during my visit, and my presence may not have been welcomed in that role due to cultural sensitivities. This illustrates how my gender and outsider status may have constrained access to certain viewpoints. I had also planned to conduct anonymous interviews with boys living in the boarding school in Namwendwa, but time and logistical constraints limited this effort.

These gaps in representation were not due to a lack of intention or awareness but reflect the real-world complexities of conducting fieldwork in a cross-cultural and resource-constrained setting. I had also intended to collect more data from larger international NGOs working on hygiene and WASH-related issues. I reached out via email to five key organisations: Oxfam, Médecins Sans Frontières (MSF), Plan International, the Red Cross, and UNICEF Uganda. I requested written input on hygiene practices, cultural barriers, and local programming. Unfortunately, only MSF responded, explaining that although they operate in Uganda, they are not active in Kampala's informal settlements and therefore could not contribute specific insights. The others did not respond. Although these organisations could not be included as participants, I still consulted publicly available reports from them where relevant to inform the contextual framework of this study.

In retrospect, I would have preferred to conduct a more longitudinal study, with time to explore hygiene practices across different age groups, gender identities, and community settings. Ideally, this would include additional fieldwork in Namwendwa, where my time was limited to a four-day visit, essentially a snapshot rather than a full picture. A future iteration of this research could include extended engagement in rural settings, anonymous interviews with boys in boarding schools, and deeper investigation into waste management and sanitation. This topics emerged as highly relevant but could not be explored in sufficient depth due to time constraints.

Challenges included occasional resistance to discussing sensitive topics (e.g., menstruation), logistical issues in traveling to remote areas, and cultural misunderstandings that sometimes required sensitive navigation. Language barriers were also significant, and while translators were helpful, nuances were sometimes lost. Some participants, especially children, exhibited

social desirability bias, responding with what they thought I wanted to hear. This was mitigated by using informal methods, visuals, and building rapport over time.

Another critical reflection relates to the scope and focus of the educational materials developed. While the tools were designed to be broadly relevant to low-income settings, I now recognise the value of tailoring them more specifically to the needs and realities of UHfH. Future improvements might include closer collaboration with UHfH staff during the design phase, more structured testing within their curriculum, and the co-creation of additional materials based on age groups or specific hygiene topics such as menstrual waste disposal or oral hygiene.

Throughout the research, I maintained a reflexive stance: continuously questioning how my background, assumptions, and privilege influenced the data collection, interpretation, and design of the final product. I am aware that complete neutrality is not possible, but I see transparency, critical awareness, and accountability as essential elements of ethical fieldwork. This approach not only enhanced the methodological quality of the study, but also deepened my personal and professional understanding of what it means to conduct respectful, community-centred research in a complex setting like Uganda. With this research, I want to contribute to improving access to information for vulnerable children in Uganda and encourage further research on this topic.



Figure 12: waterpoint at Kidiki Primary School

6 Research results: Analysis interviews

The research conducted during my internship aimed to explore the impact of basic hygiene education on children living in vulnerable conditions, specifically in the Namuwongo slum in Kampala and the rural district of Kamuli. Using a mixed-methods approach that included participatory observation, in-depth interviews, and informal conversations, I examined the hygiene-related knowledge, beliefs, and practices of children, teachers, and caregivers. This section presents the key findings, structured around the three sub-questions of the study. Namely, *“What is the importance of basic hygiene education in Namuwongo, Uganda?”*, *“What are the basic hygiene needs of vulnerable children living in this community?”* and *“How can we provide adequate and sustainable hygiene education for these children, considering their social and economic context?”*.

6.1 The importance of basic hygiene education in Namuwongo

The need for basic hygiene education in Uganda, particularly in urban informal settlements like Namuwongo, is urgent and deeply connected to children’s health, educational participation, and sense of dignity. This section draws on in-depth interviews and observations to demonstrate how the absence of structured hygiene knowledge contributes to preventable illness, school absenteeism, and low self-esteem. It also highlights the potential for positive change when education is made accessible and culturally relevant.

6.1.1 Lack of hygiene knowledge as a root cause of illness and mortality

Many children in Namuwongo grow up without learning even the most basic hygiene principles. As Ronald Eligu, founder of Touch the Slum, observed:

“Many people, especially kids, don’t really understand the consequences of not washing their hands or not boiling water... These are basic things, but when no one teaches you, you don’t realize how serious it can get.”

This lack of awareness has deadly consequences. Ronald confirmed that his organisation has witnessed deaths due to preventable hygiene-related illnesses such as cholera, typhoid, and diarrhoea. These are illnesses that continue to claim lives even though they are avoidable through simple practices.

These field insights are strongly echoed in global literature. The WHO (2022) confirms that handwashing alone can reduce diarrhoeal diseases by 40% and respiratory infections by 21%,

yet such practices remain uncommon in Namuwongo unless there is a health crisis like Ebola. As Ronald stated:

"You only see a real push when there's a crisis like Ebola or cholera... Even in schools, kids rarely get taught how to wash their hands."

Midwife Diane shared a similarly painful observation:

"I've seen children die because they don't know how to clean a wound or even wash their hands. It's not only a lack of soap, it's a lack of knowledge that kills."

6.1.2 Absenteeism and shame: the educational cost of hygiene poverty

Beyond illness, poor hygiene education leads directly to school absenteeism, particularly for girls. In interviews, girls openly shared that they stay home during menstruation due to fear of leaks, odour, or teasing. One student from UHfH told me:

"If I don't have pads, I don't go to school. I'm scared people will laugh. Sometimes I just stay in bed."

Teacher Resty from Kidiki Secondary School confirmed this widespread issue:

"Some girls use pieces of old clothes or even parts of their father's underwear. Washing reusable pads is hard because they have no privacy, and they're ashamed to hang them out to dry."

This deeply affects self-esteem. Girls link menstruation with shame and silence, often having no adult to guide them. Teacher Resty explained:

"Some girls get their first period at school and panic because they don't know what is happening. That's why I start educating them from Senior 1, before it happens."

Menstrual hygiene is not only a health concern, it's a major barrier to education and equity. Literature affirms that girls facing menstrual stigma and lack of products are significantly more likely to miss class and eventually drop out (Hennegan et al., 2016; UNESCO, 2021).

6.1.3 Language and cultural barriers to learning

Another critical barrier to hygiene education is language. One teenage girl from Namwendwa shared that although a hygiene session was once offered by an NGO, it was not helpful:

"They came months ago and talked about periods, but it was all in English. Many of us didn't understand it. We need it explained in Luganda."

This reflects a broader challenge: educational content is often not adapted to the linguistic or cultural context of the children. Even well-meant interventions fail when children don't grasp the meaning of complex terms or abstract biological explanations.

This also applies to teachers. As Resty noted:

"Sometimes we don't have the training ourselves. I teach what I know, but we need better materials and refresher training, especially for new topics like menstrual cups or hygiene for girls with disabilities."

6.1.4 Education works: observed change after sessions

Despite these challenges, my fieldwork showed that education has a direct and positive effect. Felicita, a colleague who helped facilitate hygiene sessions, reflected:

"After we gave just one session about handwashing, I saw kids doing it on their own before eating. They understood the 'why'. That made a big difference."

This behavioural shift, from passive to proactive hygiene, highlights the power of targeted, age-appropriate learning. Ronald also emphasized this:

"We've seen the biggest impact when we focus on kids. Make it friendly, repeat the message, use visuals. That's what sticks."

And Roberts from AYDEL drew a clear line between knowledge and survival:

"Many of the deaths we see could be avoided with simple information. Kids need to know how to respond early, not wait until it's too late."

Similarly, Daniel from the Walk of Hope Foundation noted:

"Children are expected to take care of themselves, especially in overcrowded homes. But they don't react to infections or wounds, not because they don't care, but because no one taught them how."

6.1.5 Awareness as the first line of defence

The voices from Namuwongo are united in their message: awareness saves lives. Whether it's avoiding an infected wound, using a pad properly, or simply brushing one's teeth, education is the first and most essential tool in the fight against hygiene poverty. Without it, resources alone are insufficient. But with the right knowledge, real, lasting change becomes possible, especially when it's culturally and linguistically accessible.

Across all research sites, there was a clear consensus that hygiene education is urgently needed. Many children lacked not only access to hygiene materials such as soap, toothbrushes, or clean clothing, but also a basic understanding of why hygiene matters. For example, one teacher at the UHfH community centre shared:

"Most of these children have never learned how or why to wash their hands. They don't know what bacteria are, and they don't see the link between hygiene and health."

During focus group discussions, children shared that hygiene was rarely discussed at home and only occasionally addressed at school. In some cases, children had never brushed their teeth or bathed regularly. One child confessed:

"I thought brushing was only for rich people. We don't have toothpaste, and no one tells us it's important."

The absence of structured hygiene education contributes not only to physical health risks, but also to social exclusion and shame. Several children reported being teased for body odour or dirty clothes, which discouraged them from participating in class or group activities.

6.2 The hygiene needs of vulnerable children

The hygiene needs of children in vulnerable contexts such as Namuwongo and Namwendwa extend far beyond access to clean water and soap. These children face structural barriers, from poverty and overcrowded housing to limited adult guidance, disability, and menstruation-related stigma. This prevents them from practicing basic hygiene. This section analyses interview data to highlight the specific and recurring needs of these children, showing how hygiene poverty is both a material and psychosocial issue.

6.2.1 Lack of basic hygiene items and persistent hygiene poverty

Interviews and fieldwork in Uganda, reveal a widespread and persistent issue of hygiene poverty among children and adolescents. This problem extends far beyond the lack of soap and water. It encompasses the daily absence of fundamental hygiene products such as

menstrual pads, underwear, toothpaste, deodorant, towels, baby diapers, and even tools like buckets, brooms, and combs. These are not luxuries, but essential components of a dignified, healthy life, and their absence severely affects children's health, education, and self-worth.

In many cases, children are forced to manage with whatever is available. Girls in rural Namwendwa, for example, reported using rags, old clothes, or even leaves during menstruation, often resulting in infections and school absenteeism. One girl shared:

"We only have two pairs of underwear, and we use cloth for our periods. Sometimes I don't go to school because I'm afraid of leaking or smelling."

Teachers and caregivers repeatedly expressed concern about the lack of hygiene materials and the resulting health risks. A teacher at Kidiki SS described the conditions many girls face:

"They use old clothes, their father's underwear, even leaves. For many girls, proper pads are not an option."

The lack of basic items is not limited to menstrual hygiene. A caregiver from the AYDEL centre explained that some children go without toothbrushes or even the knowledge of why oral hygiene matters:

"I thought brushing was only for rich people. We don't have toothpaste, and no one tells us it's important."

Other commonly reported shortages include soap, deodorant, Vaseline, combs, towels, nail cutters, scrubbing brushes, and razors. The implications are serious, children with poor hygiene face bullying, social exclusion, and shame, leading to reduced school attendance and low self-esteem. As teacher Resty observed:

"Some students skip school because they feel ashamed. They smell, or their clothes are dirty, or they didn't shave. That's not because they're lazy, it's because they don't have what they need."

The lack of household cleaning tools further compounds the problem. Ronald Eligu from Touch the Slum highlighted this overlooked dimension:

"They don't have a dust bin, so rubbish is thrown outside. No broom, no basin, no bucket... how will you wash clothes or clean your room? These are poverty symptoms people forget to talk about."

Poor sanitation infrastructure exacerbates these challenges. Toilets are often dirty, overcrowded, and unsafe, especially for girls during menstruation. A boy from Namuwongo reported:

"Sometimes I go the whole school day without using the toilet. It's too dirty, and there's never toilet paper."

Another distressing example was shared by a caregiver:

"A mother came to us saying she had to reuse baby diapers because she couldn't afford new ones. That child got serious rashes and infections."

These structural deficits lead not only to physical ailments like rashes, infections, and dental issues, but also to feelings of humiliation and exclusion. The result is a form of systemic marginalization, where lack of access to hygiene prevents children from participating fully in school and social life.

According to WHO and UNICEF (2021), hygiene poverty includes not only the lack of consumable hygiene items but also the absence of the tools and facilities necessary for maintaining health and dignity. This aligns with findings from Hennegan et al. (2016), who argue that inadequate access to hygiene leads to illness, stigma, and educational inequality. As Ronald Eligu noted:

"We need affordable sanitary pads, more toothbrushes and toothpaste. People might use the same toothbrush for a whole year or more. Also, just basic soap and water stations."

Yet, even when knowledge about hygiene is present, children often lack the means to apply it. As one child poignantly stated:

"I thought brushing was only for rich people."

Thus, hygiene education alone is insufficient without simultaneous investment in the provision of materials and infrastructure. Any meaningful strategy must combine educational outreach, material distribution, and improvements in sanitation facilities. Only by addressing these interconnected needs can children gain access to a healthy and dignified life, and a fair chance at education.

6.2.2 Vulnerability

Vulnerable children are often the least likely to speak up when they are struggling with hygiene. Teachers described how some students hide infections or skin diseases out of shame. A key group affected by hygiene poverty includes children who lack consistent adult care. Many live with elderly grandparents or siblings who themselves have limited knowledge of hygiene. Daniel from the Walk of Hope Foundation observed:

“They’re expected to take care of themselves, even if they’re just 10 years old. But they don’t react to infections or wounds, not because they don’t care, but because no one taught them how.”

Without guidance, children fail to connect basic hygiene with health outcomes. Some reported not knowing how to brush their teeth, clean wounds, or why these actions mattered at all. Another key group affected are children with disabilities or chronic illnesses face even greater barriers, they are overlooked and underserved. A social worker at UHfH shared:

“We had a girl with a mobility impairment who couldn’t get to the latrine without help. She used to just stay inside. No one trained her caregivers on hygiene management.”

Inclusive hygiene support must include accessible toilets, visual aids, and hands-on demonstrations to meet the needs of all children.

6.2.3 Teachers and caregivers need more support

The burden of hygiene education often falls on under-resourced teachers and caregivers. Many of them lack the tools and updated information to guide children effectively. As teacher Resty stated:

“I teach what I know, but we need more materials and refresher training. Hygiene for girls with disabilities or new topics like menstrual cups are difficult to explain without help.”

Educators also stressed the need for culturally relevant, age-appropriate tools. Songs, pictures, posters, and local-language explanations were seen as far more effective than lectures or English-only materials.

6.2.4 Education and materials

A recurring theme across all interviews was that hygiene education and support must be inclusive. Not just targeting average students, but also accounting for age, gender, physical ability, and household income. Felicita, after leading a hygiene session, noted:

“After just one talk, I saw kids washing their hands before eating. They understood the ‘why’. That made a big difference.”

So education plays a vital role in improving hygiene, it must be paired with consistent, age-appropriate, and culturally adapted materials. Yet as Roberts from AYDEL warned:

“Many of the deaths we see could be avoided with simple information. Kids just don’t know what to do, and when you add poverty on top of that, it becomes a tragedy.”

However, such changes require sustained efforts. As Ronald Eligu emphasized:

“We need more frequent training sessions, not just once every few months. It has to be ongoing.”

The hygiene needs of vulnerable children in Uganda are both urgent and complex. Basic items such as soap, pads, and clean towels are essential, but equally critical are education, infrastructure, and emotional support. The lack of these resources not only harms children's physical health but affects their confidence, participation in education, and sense of dignity. To answer the sub-question *“What are the basic hygiene needs of vulnerable children living in this community?”* we must acknowledge that hygiene needs are not just material, but deeply social. They are not just a privilege, hygiene is a right. Solutions must be inclusive, sustained, and responsive to the lived realities of the most vulnerable.

6.3 How to provide adequate and sustainable hygiene education

For hygiene education to be both effective and sustainable in low-resource settings such as Namuwongo, it must be rooted in the lived realities of the children it targets. Interview data and field observations at UHfH revealed that traditional, lecture-based hygiene education is often ineffective, particularly in communities where literacy levels vary widely and where not all children understand English or Luganda well enough to follow written instructions.

As such, participatory, visual, and low-cost methods were consistently highlighted as the most impactful strategies. Children responded enthusiastically to songs, drawings, stickers, and storytelling, especially when these tools included familiar characters or local scenarios. One strong example was the “Wash Your Hands” song, adapted from the melody of “Baby Shark”, which was sung with enthusiasm by younger children at UHfH. This simple, playful approach helped reinforce hygiene messages in a memorable and joyful way.

The use of visual materials was found to be essential, particularly for younger children or those who are not confident readers. Many participants noted that children "only look at the pictures" or ignore written text entirely. A teacher from Kidiki SS underlined the importance of representation in visual design:

"We need booklets with pictures, especially with black children, so they can recognise themselves. Many materials show white people, which makes it feel distant."

This reflects a broader concern with cultural relevance. Images of snow, modern tiled bathrooms, or children wearing clothes unfamiliar to the learners' context may alienate rather than engage. Effective hygiene education must therefore depict local realities, including outdoor kitchens, jerry cans, pit latrines, and community water points, and children who reflect the learners' appearance and lifestyle.

Moreover, the effectiveness of hygiene education is not only about the materials themselves, but how often and how consistently they are used. As several educators noted, a single workshop or lesson is rarely enough to bring about behavioural change. Recurring sessions, trained staff, and regular reinforcement were frequently mentioned as crucial components. As one student from UHfH reflected:

"We teach what we know, but without materials or refresher sessions, it fades. We need something regular, not once every few months."

Stickers were also praised for their practicality and durability compared to flyers or posters, which are often lost or discarded. Ronald Eligu from Touch the Slum explained:

"Flyers are thrown away or get dirty. But if you put stickers on a wall, or near the water tank, they stay. The kids see them every day."

In addition to visuals, oral methods such as singing and call-and-response activities align well with local learning cultures. In Uganda, children frequently engage in music, dance, and storytelling from a young age. Hygiene songs are particularly helpful for reinforcing daily habits like handwashing, toothbrushing, or safe toilet use. These songs are inclusive, do not depend on literacy, and become embedded in daily routines through repetition.

To ensure both children and educators benefit, materials should be designed to support classroom use as well as informal learning. Teachers and caregivers need clear, simple tools that allow them to confidently explain hygiene topics, including sensitive ones like menstrual hygiene or sanitation. Materials co-developed with local educators and

stakeholders ensure not only accuracy but community ownership, increasing the chances of long-term use.

In conclusion, the following elements are essential for sustainable hygiene education in this context:

- **Link to learners:** Education must reflect the real-life settings, language abilities, and responsibilities of children in communities like Namuwongo.
- **Visual and participatory:** Use of stickers, pictograms, illustrated booklets, and songs ensures that hygiene messages reach children regardless of reading ability.
- **Cultural representation:** Characters, settings, and tools in the materials must resemble the children's environment and identities to avoid alienation.
- **Consistency and repetition:** One-off interventions are insufficient, hygiene education must be reinforced regularly and made part of children's routines.
- **Teacher-friendly:** Materials should empower local educators with accessible tools and visual aids to deliver consistent hygiene messages.
- **Community involvement:** Co-creation with local stakeholders ensures relevance, trust, and long-term sustainability.

When hygiene education is done with the community, not just for it, it becomes a tool of empowerment. It not only improves health outcomes, but affirms dignity, promotes inclusion, and builds healthier futures for all learners.

6.4 Summary of interview analysis

The analysis of interviews with children, teachers, caregivers, and NGO workers in Namuwongo and Namwendwa reveals that hygiene education is not only a matter of public health, but also of social equity and personal dignity. The first sub-question on the importance of basic hygiene education shows that knowledge about hygiene is often absent or fragmented, yet crucial for reducing preventable diseases, boosting school attendance, and breaking cycles of shame and exclusion. Education, especially when culturally adapted and repeated consistently, has proven transformative, as seen in children's behavioural changes after even one session.

The second sub-question on the hygiene needs of vulnerable children exposes a much broader and more complex reality than lack of soap or water. Hygiene poverty includes the absence of menstrual products, underwear, towels, deodorant, and cleaning tools, as well as inadequate toilets and poor access to guidance or supportive adults. These gaps are both material and psychosocial, leaving children not only at risk of illness, but also of stigma,

absenteeism, and low self-esteem. Girls, children with disabilities, and those without stable caregivers face particularly acute barriers.

Finally, the third sub-question how to provide adequate and sustainable hygiene education highlights the need for participatory, visual, and inclusive methods. Hygiene education must go beyond one-off interventions and become embedded in children's routines, using culturally relevant materials and involving caregivers and teachers who are equipped and empowered. Sustainability depends on regularity, relevance, and representation.

In sum, the interviews demonstrate that hygiene education in low-resource settings must be holistic: combining knowledge with tools, infrastructure with empathy, and short-term lessons with long-term strategies. Addressing hygiene poverty is not merely about cleanliness. It is about enabling every child to feel safe, respected, and able to participate fully in daily life and learning.

7 Research results: Project and product

7.1 Description

The aim of this project is to support vulnerable children living in Uganda by addressing their basic hygiene needs through accessible, participatory, and contextually relevant education. In response to the research question, *“How can low-cost, participatory, and educational hygiene interventions improve basic hygiene practices among vulnerable children and adolescents in Namuwongo, Uganda?”*, I developed a hygiene education package specifically tailored to the daily realities of children in informal settlements. The product consists of five core components: (1) a booklet for children explaining basic hygiene practices, (2) a practical teacher’s manual with workshop instructions, (3) a visual hygiene poster, (4) a hygiene-themed sticker for visual reinforcement, and (5) several participatory hygiene sessions conducted and tested both in the primary school and the community centre of UHfH. These materials respond directly to the urgent needs and knowledge gaps identified during my fieldwork, including in-depth interviews and observations with children, teachers, caregivers, and NGO staff.

The primary goal of this initiative was to provide essential hygiene education, foster awareness, and improve practices related to health and well-being. At my internship site, there was a clear demand for accessible educational resources, not only for children but also for teachers. To ensure cultural and contextual relevance, the development of the materials followed a participatory and community-centred approach, as described in the methodology chapter. This involved ongoing engagement with key stakeholders to understand their hygiene-related challenges, beliefs, and practices.

The overarching aim of the project was to promote hygiene awareness by delivering educational programmes and ensuring access to essential hygiene services, as these interventions can significantly enhance both quality of life and public health outcomes. In line with this objective, the project addressed multiple pillars of basic hygiene, as outlined in the conceptual framework (see sections 3.4 and 3.5), and was specifically designed to reflect the five key hygiene domains identified as most critical by David, the local project coordinator at UHfH.

Firstly, I aimed to equip children with accurate and comprehensive knowledge about basic hygiene, including hand hygiene, oral hygiene, body hygiene, clothing hygiene, and environmental hygiene (figure 13). These domains served as the structural foundation for both the booklet and the educational sessions. To support behavioural change, a sticker was

developed to promote regular handwashing, functioning as a visual reminder in children's daily environments. Additionally, a poster illustrating all five hygiene domains in a simple, colourful format was designed for use on the playground and in community spaces. Both tools were intentionally crafted to be low-cost, contextually appropriate, and accessible to children regardless of literacy level, ensuring that the educational messages could be easily understood, remembered, and applied. The emphasis on hand hygiene was particularly strong, following specific guidance from UHfH leadership, who highlighted its urgent importance during the fieldwork phase.



Figure 13: hygiene education package at UHfH

Secondly, I aimed to equip children with accurate and comprehensive knowledge about basic hygiene, including the emotional and social challenges linked to hygiene poverty. Many children, especially adolescents, expressed feelings of shame, exclusion, or bullying due to body odour, dirty clothes, or lack of access to deodorant and soap. Through participatory sessions that included songs, games, open conversations, and storytelling, I worked to create a safe environment where children could speak about hygiene without embarrassment. One student from Namuwongo said, *"Sometimes I don't go to school because I smell. We don't have soap or deodorant, and I'm scared other kids will laugh."* Addressing these psychosocial barriers was essential to foster lasting change, as improved hygiene practices are not only driven by knowledge but also by confidence and self-worth. This approach was especially effective with adolescents, who are typically more hesitant to discuss personal or sensitive topics openly.



Figure 14: donation of toothbrushes and tubes of toothpaste at UHfH community centre

Lastly, I aimed to equip children with accurate and comprehensive knowledge about basic hygiene, including the use, care, and maintenance of essential hygiene materials. Thanks to financial support from my local municipality and Jessy, I was able to purchase and distribute 200 toothbrushes and tubes of toothpaste to children at the UHfH community centre (figure 14). These items were handed out during the sessions to reinforce the educational content and allow children to put what they learned into immediate practice. In collaboration with Jessy, Lara, and the NGO Skills for Change, we also provided reusable sanitary pads, reusable diapers, and knickers to young children and mothers (figure 15). These resources were in high demand based on interviews and focus group discussions. A 13-year-old boy from Namuwongo shared, *“I only have two pairs of underwear. Sometimes I don’t meet with friends because I’m afraid of smelling.”* All recipients were given clear verbal and written instructions on how to properly clean and reuse these items, responding to a critical need, as studies have shown that improper sanitisation due to lack of clean water and soap can pose serious health risks.



Figure 15: donation of reusable sanitary pads, diapers and knickers at UHfH community centre

7.2 Development process

The development of the hygiene education package was an iterative and participatory process, grounded in the fieldwork I conducted in Uganda and informed by a combination of observations, interviews, and literature. The idea emerged in response to the urgent hygiene needs observed during my internship at UHfH and was shaped by direct input from children, teachers, and NGO workers. In particular, the lack of accessible, age-appropriate, and culturally relevant hygiene education materials was consistently highlighted across all research sites. This feedback formed the basis for a practical, low-cost educational toolkit consisting of a booklet for children, a teacher's manual, hygiene posters, stickers, and participatory workshops.

7.2.1 Prototype development

The idea for this project arose during my internship at UHfH in Uganda, where I observed firsthand the urgent hygiene challenges facing vulnerable children living in informal settlements such as Namuwongo. Through interviews, observations, and informal conversations with children, teachers, and NGO staff, I identified critical gaps not only in access to basic hygiene materials but also in knowledge and behavioural practices. These findings served as the foundation for the creation of a participatory and culturally grounded hygiene education package.

The product was designed around five essential hygiene domains: hand hygiene, oral hygiene, body hygiene, clothing hygiene, and environmental hygiene. These were identified in the conceptual framework (see sections 3.4 and 3.5) and reinforced by the UHfH project coordinator David. The final package consisted of: a children's booklet entitled "My Hygiene Superpowers" (Appendix E), a teacher's guide for hygiene education (Appendix G), a hygiene poster (Appendix D), hygiene-themed stickers (Appendix C), and participatory workshop materials including interactive assignments (Appendix F).

- 1. Children's booklet entitled "My Hygiene Superpowers" (Appendix E):** I chose to create a booklet because it is an easy and inexpensive way to provide a lot of information. By offering both an online version and a printed, laminated version for schools and organisations, the booklet serves as a sustainable resource. The laminated copies are durable, making the booklet long-lasting. The booklet effectively uses graphics to make the information more visible, making it more engaging and understandable. The children's booklet was written in accessible English and supported by colourful illustrations and pictograms to ensure inclusivity, especially for children with limited literacy. The character *Nanyonjo* is named after the Luganda word for "clean" and acted

as the hygiene superhero guiding children through the five hygiene practices. Each section explained why the practice matters, how to do it, how often it should be done,



Figure 16: illustration of the children's booklet

and what the impact is. Children were encouraged to become hygiene heroes by mastering all five superpowers. The booklet also included step-by-step guides on handwashing and toothbrushing, designed for potential enlargement into classroom posters. I wanted to adapt the booklet and session to the specific audience. Interviews and informal conversations revealed a lack of informative booklets with pictures of people of colour. Many Ugandan schools still use pictures and booklets with images of white people. I felt it was important for the children to feel involved in the booklets, so I used pictures of people of colour so they could see themselves represented.

2. **A teacher's guide for hygiene education (Appendix G):** The teacher's guide complemented this with more detailed theoretical background, sourced from the Ministry of Health Uganda, UNICEF Uganda, and WaterAid Uganda. It included a five-week lesson plan with weekly themes, workshop instructions, key international hygiene days and suggested activities, and evidence-based, age-appropriate techniques for

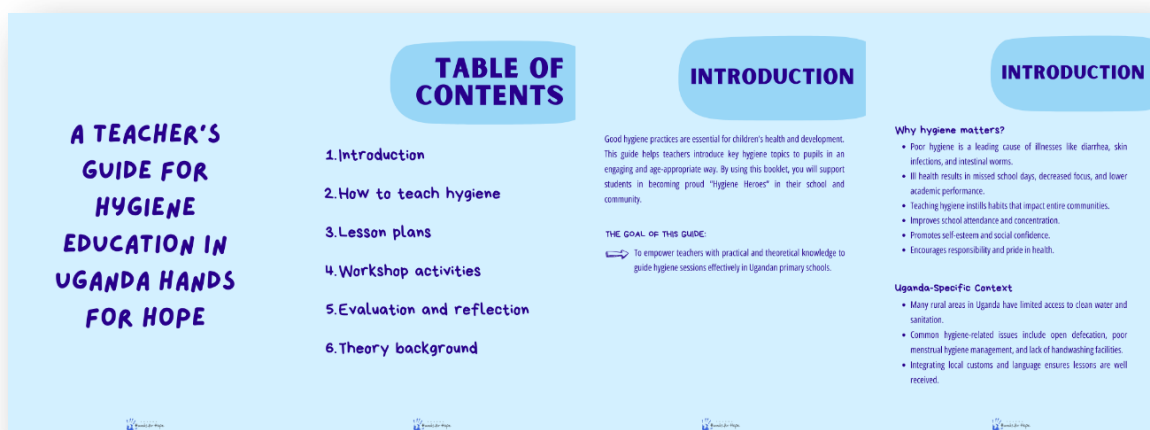


Figure 17: illustration of the teacher's hygiene guide

teaching hygiene. Both booklets were designed with a consistent visual identity, using UHfH's official blue colour scheme. Blue is associated with water, cleanliness, and health, reinforcing the hygiene theme. The decision to print the booklets on plastic was based on the need for durability in Uganda's climate, especially during rainy seasons. Laminated materials withstand outdoor conditions better and can be reused across school years.

- 3. A hand hygiene sticker (Appendix C):** To further support habit formation, a set of hygiene-themed stickers was developed and strategically placed in high-traffic, hygiene-sensitive areas such as toilets, kitchens, and classrooms. Each sticker included a simple instruction, such as "Wash your hands with soap for at least 20 seconds" accompanied by colourful pictograms to ensure visual recognition even for children with limited literacy. The goal was to create consistent, non-verbal reminders to encourage regular hygiene behaviours throughout the day. A total of twenty stickers were printed on durable plastic and distributed in the school and community centre. Their placement was guided by the observed routines of the children and feedback from teachers. According to one student, *"Now I see the sticker every time before I eat or after I go to the toilet, it helps me remember."*



Figure 18: sticker hand hygiene

4. **A hygiene poster (Appendix D):** To complement the booklet and reinforce key hygiene messages in communal spaces, I developed a large hygiene poster summarising the five hygiene domains through simple slogans and vibrant pictograms. The poster carries the



Figure 19: hygiene poster

central message “Let’s stay clean, stay healthy!”, a slogan that children now enthusiastically repeat during sessions. Each hygiene domain is illustrated with an easy-to-recognise icon and labelled in simple English, featuring terms relevant to school life such as “uniform,” “classroom,” and “playground”. To ensure visibility and durability, the poster was printed three times on waterproof rubber material, each more than 1.5 metres tall, and is now displayed prominently in the schoolyard and community centre. Its placement in these high-traffic areas was intentional, serving as a constant reminder of good hygiene practices throughout the school day.

7.2.2 Testing and evaluation

The first prototypes were tested through participatory sessions at UHfH’s school and community centre, as well as in the rural village of Namwendwa. I collaborated with teacher Felicita, who led most of the sessions in the school, while I co-facilitated and supported her. This was a deliberate choice, grounded in the belief that hygiene education should be community-led and sustainable beyond my involvement. Felicita’s engagement ensured the sessions were relevant and context-sensitive.

In the community centre, I worked closely with Aromo Procedure, a community member I helped train to continue delivering the sessions after my departure. The oral hygiene session there was particularly engaging: children sang songs, answered questions, demonstrated toothbrushing techniques, and completed assignments that involved colouring and matching images to words (figure 20). The content was translated into Luganda during the sessions to maximise understanding. Children expressed surprise at learning they should brush their tongues and gums, some had never held a toothbrush before. One child told me, *"I didn't know you also have to brush your gums and tongue, I always thought brushing teeth was enough."*



Figure 20: session oral hygiene at community centre UHfH

Reactions from teachers and children were overwhelmingly positive. Many teachers admitted they also learned new facts, especially about handwashing. *"Even I didn't know the proper way to wash hands with all the steps"*, one teacher confessed after the session. Children expressed pride in their new knowledge and enthusiasm about the superhero theme. The stickers were placed in high-traffic areas such as toilets, kitchens, and classrooms to reinforce key messages. The poster was printed three times on large, waterproof rubber material and is now displayed in the schoolyard and community centre.

Due to the limited time of my stay in Uganda, I could not gather long-term feedback. However, by keeping in touch with the organisation, the booklet could be continuously adapted and improved based on future feedback. Ongoing collaboration can ensure that the booklet remains a sustainable and effective tool for the children, adapting to their changing needs and circumstances. Regular updates and feedback can significantly improve its sustainability and relevance over time. After the evaluation and necessary adjustments, the session and the booklet were used in the school. Below is a picture taken during the hygiene session (figure 21).



Figure 21: session at UHfH school with Felicity



Figure 22: booklets for session at UHfH

7.2.3 Sustainability

A strong focus of the project was on ensuring long-term impact. This was achieved by designing the materials to be reusable and weather-resistant, embedding the programme within existing school and community structures, and training local facilitators. Felicity continues to deliver sessions in the school using the teacher's guide, and Aromo Procedure is active in the community centre. The five-week hygiene lesson plan was designed to help embed hygiene education into the regular school curriculum, turning it into a recurring 'theme of the week' rather than a one-time intervention.

All materials were left with the organisation in physical and digital format, allowing for continued printing and distribution. The assignment sheets (Appendix F) were adapted for both group demonstrations (A3 format) and individual child use (smaller size). These are now used particularly in nursery and community centre activities.

Importantly, I plan to share the final version of this thesis with UHfH and partner organisations. By doing so, the insights and tools developed during this research can be built upon, expanded, and integrated into future programming. In the words of one teacher, *"Now we can keep teaching this even when you're gone."*

Additionally, the teacher's guide was intentionally designed not only to be used independently by educators but also to integrate hygiene education into the broader school curriculum as a recurring weekly theme. By including national hygiene days and lesson plans, it aligns with both local needs and international standards. This will help build routine awareness rather than offering one-off sessions. The project also laid the foundation for partnerships between UHfH and other grassroots initiatives such as Skills for Change, further reinforcing local ownership and continuity. Through participatory design, practical delivery, and sustainable implementation, the hygiene education package offers a concrete, contextually grounded contribution to improving the health and dignity of vulnerable children in Uganda.

8 Conclusions and recommendations

This bachelor dissertation explored how low-cost, participatory, and visual hygiene education can improve basic hygiene practices among vulnerable children in Uganda, specifically in the Namuwongo slum and Kamuli district. The research emerged from a six-month internship at Uganda Hands for Hope, where the effects of hygiene poverty were deeply visible in children's daily lives. Many had never brushed their teeth, shared only one pair of underwear, or routinely skipped handwashing after using the toilet. These were not isolated incidents, but common realities among children in both urban and rural settings.

The central research question guiding this study was: *"How can low-cost, participatory, and educational hygiene interventions improve basic hygiene practices among vulnerable children and adolescents in Namuwongo, Uganda?"*. To support this, three sub-questions were formulated:

- *"What is the importance of basic hygiene education in Namuwongo, Uganda?"*
- *"What are the basic hygiene needs of vulnerable children living in this community?"*
- *"How can we provide adequate and sustainable hygiene education for these children, considering their social and economic context?"*

To answer these questions, a qualitative methodology was used. Fieldwork included participatory observations, informal conversations, interviews, and focus group discussions with children, caregivers, teachers, and NGO staff. A unique element of this research was the design and implementation of a visual hygiene education package, consisting of child-friendly posters, pictogram-based booklets, stickers, and a teacher's manual. It was created specifically for contexts with low literacy and limited access to educational materials.

The findings revealed that poor hygiene practices among children were less the result of material scarcity, and more the result of limited awareness and inconsistent education. Although clean water was often accessible, many children had no understanding of why hygiene mattered. Teachers lacked both the training and resources to effectively deliver hygiene lessons. In contrast, when provided with engaging, participatory tools, both children and educators responded enthusiastically. Activities such as role-plays, hygiene songs, and visual stickers improved children's engagement and helped internalise behaviour change. Caregivers also reported noticeable improvements in children's hygiene habits at home. These results confirm that effective hygiene education does not require expensive infrastructure. It requires relevance, simplicity, and cultural sensitivity (Harrison et al., 2019; UNICEF, 2020).

The study confirms that basic hygiene education is essential in Namuwongo. Lack of awareness and knowledge, not just lack of materials, was a core problem. Without understanding the "why" behind hygiene, behaviour change remained limited. This confirms the first sub-question. Secondly, the hygiene needs of vulnerable children extend beyond products, they also need supportive adults, safe spaces, and engaging tools. Shame and misinformation were major barriers, particularly for girls (Boosey et al., 2014; Sommer et al., 2015), answering sub-question two. Finally, sustainable hygiene education must be embedded in existing systems, schools, community centres, family life, and built around affordable, localised solutions. Visual tools, teacher training, and integration into daily routines all proved successful strategies. This addresses the third sub-question.

8.1 Strengths

One strength of this research is its practical orientation. The hygiene package was developed collaboratively with local educators and children, ensuring cultural relevance. The visual format increased accessibility for younger children and those with limited literacy skills, making the product suitable for both formal schools and informal community centres.

A second strength is the participatory nature of the fieldwork. Children actively engaged in co-creating songs and posters, and teachers gave feedback that helped improve the materials. This bottom-up approach enhanced both the effectiveness and sustainability of the intervention.

A third strength is the cross-context testing: the product was implemented in both an urban slum (Namuwongo) and a rural area (Kamuli). This allowed comparison across different environments and demonstrated the adaptability of the approach.

8.2 Limitations

There are also several limitations. The most significant is the limited sample size and the qualitative nature of the data. Although the results are promising, they cannot be generalised to all Ugandan schools or communities.

Secondly, not all hygiene domains were fully addressed in the final product. Due to time constraints and infrastructural complexity, sanitation and menstrual hygiene were not formally included, though they are vital issues in public health and education (WHO/UNICEF, 2021).

Third, while visual tools helped overcome some language barriers, translation into local languages would further improve accessibility and understanding. In some sessions, support from translators was necessary to ensure comprehension.

Another limitation is the underrepresentation of male perspectives. Due to cultural sensitivities and logistical constraints, it was difficult to engage boys and male staff in discussions on hygiene, which may have led to a gender imbalance in the findings. Furthermore, although collaboration with UHfH was consistent, the co-creation of educational tools could have benefited from deeper, more structured involvement by local educators.

Finally, there is a need to reflect on positionality. As a white researcher working in a Ugandan context, I tried to be culturally sensitive and collaborative. However, I am aware that some aspects of power and privilege may have influenced both data collection and interpretation. True ownership of hygiene education must remain with local educators, families, and communities.

8.3 Recommendations

Based on the findings of this study, several clear and actionable recommendations can be made. These are aimed at various stakeholders, from national policymakers to NGO staff, teachers, and caregivers. To have a sustainable impact on basic hygiene behaviour among vulnerable children, interventions must occur at multiple levels: macro (structural), meso (organisational), and micro (individual).

8.3.1 Macro-level

The macro-level or national level is very important in this case. Uganda still has a long way to go to address its problems. In doing so, there is a need for structural changes at the political level. The following recommendations could be a starting point:

- 1) Integrate hygiene education into national curricula: The Ministry of Education and Sports in Uganda should mandate structured hygiene education in all schools, starting from early childhood education. These lessons should go beyond biology and include practical guidance on daily hygiene routines, using child-friendly and visual materials.
- 2) Subsidise basic hygiene products for school-age children: Many families in informal settlements cannot afford soap, toothpaste, or sanitary products. Public-private

partnerships could ensure free or subsidised access to essential items through schools and community centres.

- 3) Improve WASH infrastructure in schools Investments should prioritise safe and private sanitation facilities, handwashing stations with soap, and menstrual hygiene disposal bins, especially in under-resourced areas. Clean facilities increase school attendance, particularly among girls.
- 4) Launch national awareness campaigns: Public media campaigns should normalise conversations about hygiene, reduce stigma (especially around menstruation), and promote community pride in cleanliness and health. These campaigns should be culturally sensitive and conducted in local languages.
- 5) Monitor and enforce WASH standards: A national hygiene monitoring system should track the implementation of WASH guidelines in schools. Collaboration between ministries (Health, Education, Water) is essential to ensure compliance and effective use of resources.

8.3.2 Meso-level

The meso-level refers to organisations in Uganda. This mainly involves looking at my own internship project, UHFH. But also, to other organisations such as Touch the Slum, Kidiki SS, Walk of Hope foundation, AYDEL and Malaika for Women and Children.

- 1) Provide regular hygiene education sessions: Organisations such as UHFH should deliver weekly sessions using engaging, visual formats. Topics should rotate to include hand hygiene, oral care, body washing, and more.
- 2) Train teachers and social workers: Many educators lack knowledge and tools to teach hygiene effectively. Organising short training sessions will help staff build confidence and consistency in delivering hygiene lessons.
- 3) Use visual, low-literacy-friendly materials: Posters, stickers, pictograms, and songs are effective in environments where reading skills are limited. These tools should be included in daily routines and adapted to the cultural context.
- 4) Strengthen collaboration between organisations: NGOs and schools should share best practices and co-develop materials. For example, organisations with experience in

reusable menstrual products can support those focusing on general hygiene education.

- 5) Evaluate outcomes: Schools and NGOs should track basic indicators such as absenteeism, visible hygiene improvements, or student feedback. Even simple tools like feedback forms or hygiene charts can guide programme improvement.

8.3.3 Micro-level

The micro-level refers to the vulnerable children in Uganda. Here, some recommendations are briefly made as to what they can do to make their situation easier.

- 1) Empower children as hygiene leaders: Children are eager to learn and share knowledge. Programmes should encourage peer learning through hygiene clubs, role-playing, and song-based education. Let children lead by example.
- 2) Engage caregivers: Caregivers should be involved through informal conversations, parent workshops, or take-home activities. Reinforcement at home is essential to form lasting habits.
- 3) Break the culture of silence around hygiene: Shame and stigma, especially regarding menstruation and body odour, must be addressed openly. Safe spaces for discussion can empower children to ask questions and seek help.
- 4) Tailor solutions to local context: Not all communities face the same challenges. Urban slums like Namuwongo need solutions that fit overcrowded, informal settings. Rural areas may need a different approach. Flexibility is key.
- 5) Promote sustainable behaviour change: Behaviour change requires more than knowledge. Visual tools, emotional engagement, and consistency help children move from awareness to daily practice.

8.3.4 Future research

Finally, I strongly encourage future research in Uganda on the topic of hygiene poverty and child-centred hygiene education. This bachelor dissertation and the developed hygiene education package are only a first step toward understanding and addressing the realities faced by vulnerable children in informal settlements and rural communities. Hygiene poverty is not simply the absence of soap or toothbrushes, but a reflection of deeper systemic barriers (educational, economic, and social) that prevent children from living with dignity and health.

Future researchers should explore the long-term impact of participatory hygiene education by following up with teachers and children to evaluate whether the knowledge and behaviours introduced during the sessions are sustained over time. This would allow the tools to be further refined and adapted based on lived experiences. Additionally, training local teachers and older students to deliver sessions independently could ensure that hygiene education continues even after the departure of external partners. A "train-the-trainer" model would help scale the approach and strengthen community ownership.

Research could also explore how to expand the package to include menstrual hygiene and sanitation education, two domains that remain closely linked to both school attendance and well-being but were beyond the direct scope of this project. Including boys in these efforts is also essential, as breaking taboos and promoting empathy requires the participation of all genders. Moreover, future studies could translate the hygiene materials into Luganda, Lusoga, or other local languages, making the content more inclusive and effective, especially for early learners and caregivers with limited English proficiency.

Finally, testing the hygiene package in other regions within Uganda or in similar low-resource contexts would help evaluate its adaptability and cultural relevance. Such comparative studies could strengthen the foundation for broader policy recommendations and evidence-based advocacy.

This research began with a simple but powerful observation: one child told me he had never brushed his teeth. Others shared that they owned only one pair of underwear or never washed their hands after using the toilet. These were not isolated stories, but everyday realities in Namuwongo. Returning to these voices reminds us why future research matters. Their stories are not just data points, they are calls to action. With further exploration, local partnerships, and a continued commitment to child-centred solutions, future researchers can build on this work and contribute to a more just, healthy, and dignified future for all children.

9 Bibliography

- Ahmed, S. M., Hossain, M. A., & Kabir, M. H. (2020). Environmental sanitation practices and health outcomes in urban slums: Evidence from Bangladesh. *Journal of Water, Sanitation and Hygiene for Development*, 10(1), 34–42.
- Anderson, W. (2012). *Public health and hygiene in historical context*. Oxford University Press.
- Aunger, R., & Curtis, V. (2016). Behaviour Centred Design: Towards an applied science of behaviour change. *Health Psychology Review*, 10(4), 425–446. <https://doi.org/10.1080/17437199.2016.1219673>
- Bagenda, D., Nambuusi, B., Kigozi, R., & Mayega, R. W. (2021). *Changing patterns of childhood illness in Uganda: Pneumonia, diarrhea, and malaria*. *African Health Sciences*, 21(3), 1032–1040.
- Bartram, J., et al. (2017). Hygiene, Sanitation, and Water: Forgotten Foundations of Health. *PLoS Medicine*, 7(11).
- Bell, D., Kinyanda, E., Mutto, M., & Ofori-Atta, A. (2020). *The impact of COVID-19 on health systems in Africa: Mental and physical health implications*. *BMJ Global Health*, 5(9), e003103.
- Biran, A., Schmidt, W. P., Varadharajan, K. S., et al. (2014). Effect of a behaviour-change intervention on handwashing with soap in India (SuperAmma): a cluster-randomised trial. *Lancet Global Health*, 2(3), e145–e154.
- Bloomfield, S. F., Exner, M., Signorelli, C., Nath, K. J., & Scott, E. A. (2009). *The chain of infection transmission in the home and everyday life settings, and the role of hygiene in reducing the risk of infection*. International Scientific Forum on Home Hygiene.
- Boosey, R., Prestwich, G., & Deave, T. (2014). *Menstrual hygiene management amongst schoolgirls in Uganda: A qualitative study*. *Pan African Medical Journal*, 19(253), 1–13.
- CDC. (2019). *Hygiene Fast Facts*. Centers for Disease Control and Prevention.
- Cronk, R., Slaymaker, T., & Bartram, J. (2015). Monitoring drinking water, sanitation, and hygiene in non-household settings: Priorities for policy and practice. *International Journal of Hygiene and Environmental Health*, 218(8), 694–703.

- Cumming, O., Arnold, B. F., Ban, R., et al. (2019). The implications of WASH and child health for SDGs. *The Lancet Global Health*, 7(8), e1036–e1045.
- Davis, R. (2014). *Foundations of disease prevention*. Health Policy Journal.
- Dickson-Gomez, J., Musoke, D., Kiwanuka, R., & Ssemugabo, C. (2023). *WASH challenges and community health in informal settlements in Kampala, Uganda*. *International Journal of Environmental Research and Public Health*, 20(4), 2274.
- Freeman, M. C., Stocks, M. E., Cumming, O., et al. (2012). Hygiene and health: Systematic review of handwashing practices worldwide. *Tropical Medicine & International Health*, 19(8), 906–916.
- Gibson, M., & Harper, I. (2013). *Sanitation and social change in rural India*. *Journal of Public Health*.
- Harrison, L. (2007). *Preventive medicine and hygiene*. Medical Standards Review.
- Harrison, M. E., et al. (2019). School-based WASH promotion: A systematic review of effectiveness. *International Journal of Environmental Research and Public Health*, 16(15), 2782.
- Hennegan, J., Dolan, C., Steinfield, L., & Montgomery, P. (2016). A qualitative understanding of schoolgirls' menstrual hygiene management in low- and middle-income countries. *International Journal of Environmental Research and Public Health*, 13(9), 905.
- Hennegan, J., Dolan, C., Wu, M., Scott, L., & Montgomery, P. (2016). Schoolgirls' experience and appraisal of menstrual absorbents in rural Uganda: A cross-sectional evaluation of reusable sanitary pads. *Reproductive Health*, 13(1), 1–12. <https://doi.org/10.1186/s12978-016-0187-3>
- Hueso, A. (2016). Institutional fragmentation in the water and sanitation sector: The case of decentralisation in Latin America. *Water International*, 41(4), 447–463.
- Humanitarian Global. (2021, November 18). *Types of hygiene*. <https://humanitarianglobal.com/types-of-hygiene/>
- ILO. (2024). *Youth unemployment and informal work in Uganda*. International Labour Organization. <https://www.ilo.org>

- Jewitt, S., & Ryley, H. (2014). It's a girl thing: Menstruation, school attendance, spatial mobility and wider gender inequalities in Kenya. *Geoforum*, 56, 137–147. <https://doi.org/10.1016/j.geoforum.2014.07.006>
- Jiménez-Redal, J. A., et al. (2018). The UN-Water GLAAS 2017 report: Financing universal WASH access. *WHO & UN-Water*.
- Jones, R., Smith, A., & Lee, T. (2017). *Germ theory and its impact on modern hygiene*. Medical History Review.
- Jones, R., Taylor, S., & Miller, J. (2017). *Hygiene and health behavior*. Global Epidemiology Reports.
- Kigozi, R., Nambuusi, B., & Bagenda, D. (2023). *Burden of communicable diseases among children under five in Uganda*. *Journal of Global Pediatrics*, 12(1), 56–64.
- Krentz, C. A., Murray, A., & Durrheim, D. N. (2021). Skin infections and hygiene in low-resource settings: A public health concern. *Journal of Global Health*, 11, 04012. <https://doi.org/10.7189/jogh.11.04012>
- Mbawalla, H. S., Masalu, J. R., & Åstrøm, A. N. (2010). Socio-demographic and behavioural correlates of oral hygiene status and oral health-related quality of life, the case of primary school children in Tanzania. *BMC Oral Health*, 10(6). <https://doi.org/10.1186/1472-6831-10-6>
- Mbonye, A. K. (2004). *Disease burden in Uganda: The role of sanitation and hygiene*. East African Medical Journal, 81(6), 298–304.
- Mbuya, M. N., & Humphrey, J. H. (2015). Preventing environmental enteric dysfunction through improved water, sanitation and hygiene: An opportunity for stunting reduction in developing countries. *Maternal & Child Nutrition*, 12(S1), 106–120.
- McMichael, C. (2019). Water, sanitation and hygiene (WASH) in schools in low-income countries: A review of evidence on impacts and sustainability. *International Journal of Educational Development*, 70, 102094.
- Miller, J., & Taylor, S. (2016). *The power of handwashing: Global health impact*. Global Health Journal.
- MoES. (2019). *Uganda National School Health Policy: Situation Analysis Report*. Kampala, Uganda.

- MoES (2022a). *Education and Sports Sector Annual Performance Report 2021/2022*. Kampala, Uganda.
- MoES (2022b). *Education Statistical Abstract*. Kampala, Uganda.
- Ministry of Health Uganda. (2021). *Annual Health Sector Performance Report 2020/2021*. Kampala, Uganda.
- Ministry of Water and Environment. (2021). *Uganda Water and Environment Sector Performance Report 2021*. Kampala, Uganda.
- Mkandawire, T. (2001). *Thinking about developmental states in Africa*. Cambridge Journal of Economics, 25(3), 289–314.
- Morgan, J., et al. (2017). Hygiene: bridging the policy and implementation gap. *WHO Bulletin*, 95(8), 540–540A.
- Musinguzi, N., Kemoli, A. M., & Okullo, I. (2020). Knowledge, attitudes, and practices of caregivers on children's oral health in Uganda. *African Health Sciences*, 20(2), 920–928. <https://doi.org/10.4314/ahs.v20i2.42>
- Muwazi, L. M., Rwenyonyi, C. M., Tirwomwe, F. J., Ssali, C., Kasangaki, A., Nkamba, M. E., & Ekwaru, P. (2005). *Prevalence of oral diseases and conditions in Uganda*. African Health Sciences, 5(3), 227–233.
- NIH. (2015). *Food safety and hygiene*. National Institutes of Health.
- NTV Uganda. (2025, April 27). *Malaria still leading cause of death in Uganda despite government interventions*. NTV News. <https://www.ntv.co.ug/>
- Oxfam. (2023). Culturally sensitive WASH: Inclusive education in low-literacy contexts. *Oxfam International Reports*.
- Park, H. (2021). *Clean living: Hygiene science and society*. Modern Health Press.
- Petersen, P. E., & Kwan, S. (2010). The 5 dimensions of oral health: A public health framework. *Community Dental Health*, 27(1), 24–29.
- Petersen, P. E., & Ogawa, H. (2016). Prevention of dental caries through the use of fluoride—the WHO approach. *Community Dental Health*, 33(2), 66–68.
- Plan International. (2023). *Menstrual hygiene and education in Uganda: A barrier to girls' education*. Plan International Reports. <https://plan-international.org>

- Roberts, A. (2011). *Public health principles*. Epidemiology and Practice.
- Saboori, S., Greene, L. E., Moe, C. L., et al. (2016). Impact of handwashing promotion interventions on child health. *American Journal of Tropical Medicine and Hygiene*, 95(3), 593–601.
- Saito, K., Araki, A., Yagi, M., & Murakami, M. (2023). School-based hygiene programs and their impact on infection-related absenteeism: A systematic review. *International Journal of Hygiene and Environmental Health*, 246, 114066.
- Smith, T., & Brown, D. (2018). *Environmental and personal health*. Health Perspectives.
- Sommer, M., Caruso, B. A., Sahin, M., Calderon, T., Cavill, S., Mahon, T., & Phillips-Howard, P. A. (2015). A time for global action: Addressing girls' menstrual hygiene management needs in schools. *PLOS Medicine*, 12(2), e1001962. <https://doi.org/10.1371/journal.pmed.1001962>
- The Hygiene Bank. (n.d.). *What is hygiene poverty?* Retrieved from <https://www.thehygienebank.com/what-is-hygiene-poverty>
- Transparency International. (2023). *Corruption perceptions in Uganda: Public sector challenges*. <https://www.transparency.org>
- UDA. (2024). *National Oral Health Survey Results*. Kampala, Uganda.
- UNDP. (2024). *Human Development Report 2024: Uganda country profile*. United Nations Development Programme. <https://hdr.undp.org>
- UNESCO. (2019). *Menstrual hygiene management in schools in South Asia: Synthesis report*. Retrieved from <https://www.unesco.org/reports/menstrual-hygiene>
- UNESCO. (2021). *Leave no one behind in education: SDG 4 progress report*. <https://unesdoc.unesco.org>
- UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. <https://unesdoc.unesco.org>
- UNICEF. (2018). *Guidance on menstrual health and hygiene*. <https://www.unicef.org/reports/guidance-menstrual-health-and-hygiene>
- UNICEF. (2018). *Guidance on WASH in Schools for All: A tool kit for basic education and gender equality*. <https://www.unicef.org/wash/schools>

- UNICEF. (2018). *Programming guidance for early childhood development in emergencies*. <https://www.unicef.org/documents/programming-guidance-early-childhood-development-emergencies>
- UNICEF. (2018). *WASH in Schools Monitoring Package*. <https://www.unicef.org/wash/schools>
- UNICEF. (2019). *Helping girls manage their periods with dignity*. <https://www.unicef.org/uganda/stories/helping-girls-manage-their-periods-dignity>
- UNICEF. (2020). *Hygiene fast facts*. United Nations Children's Fund. Retrieved from <https://www.unicef.org/wash>
- UNICEF. (2020). *WASH in schools: A companion to the Child Friendly Schools Manual*. <https://www.unicef.org/publications>
- UNICEF. (2023). *U-Report Uganda: Youth engagement and demographic trends*. <https://www.unicef.org/uganda>
- United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. *UN General Assembly*.
- van Reeuwijk, M. (2003). Hygiene education with pictograms. *SNV Uganda*.
- Vujcic, J., Ram, P. K., & Blum, L. S. (2015). Handwashing promotion in humanitarian emergencies: Strategies and challenges according to experts. *Journal of Water, Sanitation and Hygiene for Development*, 5(4), 574–585. <https://doi.org/10.2166/washdev.2015.100>
- WaterAid Uganda. (2023, October 23). *Why toilets matter: The crisis of open defecation in Uganda* [Video]. YouTube. <https://www.youtube.com/watch?v=AbExKEL39dY&t=197s>
- WHO. (2009). *WHO guidelines on hand hygiene in health care: First global patient safety challenge. Clean care is safer care*. <https://www.who.int/publications/i/item/9789241597906>
- WHO. (2020). *Clean care is safer care: Environmental hygiene in health care*. World Health Organization. <https://www.who.int/publications/i/item/clean-care-is-safer-care>
- WHO. (2020). *Water, sanitation and hygiene (WASH)*. World Health Organization.

- WHO. (2022). *Global hygiene strategy 2021–2030: Accelerating progress on hygiene for all*. World Health Organization.
- WHO. (2022). *Oral health*. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/oral-health>
- WHO. (2023). Progress on household drinking water, sanitation and hygiene 2000–2022. *WHO and UNICEF Joint Monitoring Programme*.
- WHO. (2023). *Water, sanitation and hygiene: Strategy 2023–2030*. World Health Organization. <https://www.who.int/publications/i/item/9789240077487>
- WHO. (2025). *Health statistics and indicators for Uganda*. World Health Organization. <https://data.who.int>
- WHO/UNICEF. (2021). *Progress on household drinking water, sanitation and hygiene 2000–2020: Five years into the SDGs*. <https://washdata.org>
- WHO/UNICEF. (2023). *Progress on drinking water, sanitation and hygiene in schools: 2000–2023*. World Health Organization and UNICEF. <https://washdata.org>
- WHO/UNICEF. (2023). WASH in Schools Global Baseline Report.
- WHO/UNICEF. (2024). *Global progress report on WASH in health care facilities*. World Health Organization.
- Williams, P., & Green, K. (2010). *Hygiene and disease prevention*. International Health Review.
- Williams, P., & Green, K. (2010). *Reducing child mortality through hygiene programs*. International Health Review.
- World Bank. (2023). *Poverty and inequality in Uganda: Data and trends*. <https://www.worldbank.org/en/country/uganda>
- World Health Organization. (2023). *Water, sanitation and hygiene (WASH)*. [https://www.who.int/news-room/fact-sheets/detail/water-sanitation-and-hygiene-\(wash\)](https://www.who.int/news-room/fact-sheets/detail/water-sanitation-and-hygiene-(wash))

10 Attachments

10.1 Appendix A: GenAI-statement

1. **Student Name:** Lieselotte Ingels
2. **Date on which you fill in the statement:** 10/06/2025
3. **Assignment:** Bachelor dissertation
4. **Did you use generative AI (GenAI) when creating this assignment?**

☒ Ja

☐ Nee

5. **What generative AI tools have you used?**

ChatGPT

6. **How did you use these tool(s) within the assignment?**

- **Brainstorming partner and communication partner:**

I used ChatGPT as a brainstorming partner to generate ideas for my essay and as a communication partner to edit my text to support my presentation. Throughout the research and writing process, I used generative AI tools in a supportive capacity. For example, to improve the clarity and flow of texts, adapt the writing style to an academic audience, translate between Dutch and English, and receive feedback on grammar, spelling, and sentence structure. These tools also provided inspiration during the drafting of reflective sections.

7. **Include the prompts you used and/or screenshots of your interactions with the GenAI tools.**

"Can you rewrite this paragraph in a more academic and formal tone without changing the meaning?"

"Please provide grammar and style feedback on this English paragraph. Focus on sentence structure and clarity."

"Translate the following reflection paragraph into academic English."

8. **Declaration on honour.**

☐ I hereby confirm that my statement accurately reflects the use of GenAI.

10.2 Appendix B: Interview transcript – Ronald Eligu (Touch the Slum)

Interviewee: Ronald Eligu, Founder and team leader at Touch the Slum Charity Foundation

Organization: Touch the Slum

Date of Interview: 19/03/2025

Location: Namuwongo, Kampala, Uganda

Interviewer: Lieselotte Ingels

Language: English

Transcript format: Q&A (based on recorded conversation, 35:45 minutes)

Introduction

1. Could you briefly introduce Touch the Slum and explain its main goals?

Sure. So, Touch the Slum works in Kampala's slum areas, mainly focusing on young people, especially teenage mothers and girls. Our goal is to create safer, more resilient communities through education, access to healthcare, and youth empowerment.

2. How does your organization fund its work? Do you rely mainly on donations?

Yes, mostly through donations. Sometimes we also partner with other organizations. For example, we've worked with the Self and Inclusive Cities project. Those donations can be in kind or financial.

3. Do you also receive donations for medical supplies or healthcare-related needs?

Yes, we do. We also work closely with public health centres to make sure youth, and especially young mothers can get the medical help they need.

General hygiene situation

4. What are the biggest hygiene challenges in the communities where you work?

One of the biggest problems is the lack of information. Many people, especially kids, don't really understand the consequences of not washing their hands or not boiling water. The trenches are full of dirty water (mosquitoes breed there) and no one cleans them.

5. Are there specific hygiene-related diseases or health issues that are particularly common?

Yes, we see a lot of malaria, typhoid, cholera during rainy seasons, and also things like tooth decay and diarrhea. These are basic things, but when no one teaches you, you don't realize how serious it can get.

6. Have there been any cases of severe illness or even fatalities due to poor hygiene conditions?

Yes, there have been deaths, especially from malaria. Even though the government gives out mosquito nets, people often don't know how to use them properly, or they don't get trained. So, they end up still getting sick.

Basic hygiene practices

7. How common is basic hygiene awareness, such as washing hands regularly, brushing teeth, and bathing daily?

It's not common at all. You only see a real push when there's a crisis like Ebola or cholera. Sometimes there are posters on doors, but that's it. Even in schools, kids rarely get taught how to wash their hands.

8. What challenges do people face in maintaining menstrual hygiene?

Many of the girls live in overcrowded rooms. So, using reusable pads becomes hard. They can't hang them to dry, they don't always have soap, and they don't always know how to clean them properly. That causes infections. We've been talking about more biodegradable disposable pads as a better solution for these communities.

9. How do people in these communities typically handle sneezing and coughing hygiene?

Honestly, it's not a common practice. You'll see people just sneeze or cough without covering their mouths. It's something that needs to be taught and built into the culture.

10. What type of soap and other hygiene products are most used? Are these products easily accessible?

Mostly basic bath soap like "Star" soap. Liquid soap is also available. But to cut costs, we make our own soap at the centre using raw materials from town.

11. What hygiene-related resources are most urgently needed?

Definitely better access to information, affordable sanitary pads, more toothbrushes and toothpaste. Because people might use the same toothbrush for a whole year or more. Also, just basic soap and water stations.

NGO initiatives and hygiene education

12. Has Touch the Slum conducted hygiene training or awareness campaigns?

Yes, we have. We've done sticker campaigns, we've taught kids about hand washing, and we're planning to do more this year. We also trained our own team to keep the work going after volunteers leave.

13. What methods do you use to educate people about hygiene?

We've used posters, stickers, songs for children, and even videos. Sometimes we share videos through WhatsApp status updates and groups. We also hold group training sessions in the communities.

14. What strategies or best practices have been most effective in spreading hygiene awareness?

We've seen the biggest impact when we focus on kids. Make it friendly, repeat the message often, and put visuals everywhere. Also, when we worked with public toilet operators and gave them materials, it helped. They reminded people to wash their hands.

15. Are there any specific success stories where hygiene education has significantly improved someone's life?

Yes. For example, some teen mothers we've worked with now have access to family planning and medical help. One girl shared how she was able to care for her baby in peace after getting counselling through our sessions.

Support and future plans

16. What are the biggest challenges in improving hygiene in these communities?

Culture, religion, lack of reading skills, and also shame, especially around menstruation. Even if we provide good products, sometimes girls are too embarrassed to use them properly because of their living situation.

17. What additional support would help make your work more effective?

We need more funding, more printed materials, and hygiene products. Also, more frequent training sessions, not just once every few months. It has to be ongoing.

18. What are Touch the Slum's future plans for improving hygiene and sanitation?

We want to continue awareness campaigns, work more with schools, and partner with health centres. Also, we want to find sustainable solutions for menstrual products. Something that's safe, affordable, and accepted by the community.

Closing

19. Is there anything else you would like to add that we haven't covered?

Just that hygiene education needs to be continuous. It's not something you teach once and forget. We need resources and community engagement to keep it alive.

20. Thank you for your time and insights!

You're welcome. Thank you too!

10.3 Appendix C: Interview transcript – Teacher Resty (Kidiki Secondary School)

Interviewee: Teacher Resty, Senior Woman Teacher

Organization/School: Kidiki Secondary School

Date of Interview: 14/04/2025

Location: Namwendwa, Kamuli, Uganda

Interviewer: Lieselotte Ingels

Language: English

Transcript Format: Q&A (based on recorded conversation, 36:21 minutes)

General hygiene lessons

1. Can you tell me more about the hygiene lessons you give at Kidiki School?

Yes, I've been the Senior Woman Teacher for about 10 years. I'm responsible for guiding girls on health, hygiene, and sanitation. I meet with them regularly, sometimes in general sessions for all girls from Senior 1 to Senior 6, and other times in smaller groups depending on the age or topic.

2. What topics do you cover when you talk about hygiene?

We cover a range of topics including personal hygiene (washing, shaving), menstrual hygiene, environmental cleanliness, latrine maintenance, washing hands, cutting fingernails, and even things like how to manage body odor. I also talk about how to clean the spaces they use, like dormitories, beds, and eating utensils.

3. How often do you teach about hygiene? Is it once per term or more frequently?

The large group sessions usually happen once a term. But for individual or smaller group needs, I do guidance and counselling continuously. If I notice certain girls are struggling with hygiene or didn't absorb the group lessons, I follow up with them personally.

4. Do you repeat these lessons throughout the year?

Yes. Especially when new students arrive or if I notice certain hygiene issues reappearing. I adapt the sessions based on what's needed.

5. Do you teach girls and boys separately or together?

I only teach girls directly, since I'm the Senior Woman Teacher. The boys are taught separately by the Senior Man Teacher, especially during hostel or assembly meetings.

Teaching methods and materials

6. What kind of materials do you use to teach hygiene?

Mostly I talk to them directly, but we also use posters and stickers. Some were brought by volunteers, like Reni, who created large posters about the menstrual cycle. We place these around the school and dorms. Unfortunately, due to rain and lack of resources, they often get damaged or fall down.

7. Do you organize workshops or interactive activities to teach hygiene?

We don't have structured workshops often, mainly due to a lack of equipment or space. We would like to show videos or demonstrations, but we don't have a projector or consistent internet access.

8. Are there any challenges in teaching hygiene in this environment?

Yes. Some students are uninterested or feel they already know what we teach. Others don't follow through with what they've learned. Lack of resources like soap, posters, or facilities is a big challenge. And sometimes I wish we had TV or internet to show educational videos.

Handwashing

9. We noticed there was no soap at the toilets. Do you usually provide soap for handwashing?

Yes, we try to. We don't leave bars of soap because they disappear quickly. Instead, we use powdered soap (like OMO) or pour liquid soap into shared basins.

10. How do you teach children to wash their hands properly?

I emphasize that washing hands with just water isn't enough, you need soap. I also teach them to keep nails short, as dirt and germs hide under long nails.

11. Are there any plans to improve access to soap or handwashing stations?

We try, but it's hard due to limited funds. We often need to ask for donations or support from partners and visitors.

Menstrual hygiene

12. Do you also teach about menstrual hygiene?

Yes, very much. I teach girls from Senior 1 onward, even if they haven't started menstruating yet. Some get their first period at school and don't know what's happening. So, I prepare them.

13. What age or grade do you start teaching girls about menstruation?

From Senior 1, because they are usually already in puberty or about to experience their first period.

14. Are reusable pads or sanitary products provided at school?

Sometimes. Volunteers like Reni have brought reusable pads, and Frieda helps raise funds for disposable ones. But we can't provide for everyone, many girls still use old clothes, or even pieces of their father's underwear.

15. Do you think girls feel safe and supported during their period at school?

Yes, they come to me like a mother figure. They know they can talk to me and ask for help. But challenges remain. Washing reusable pads is hard at school due to time, shame, and lack of privacy.

16. Is there someone they can talk to if they have questions or concerns?

Yes, they come to me directly. I always make sure they feel safe and comfortable.

Toothbrushing and general hygiene

17. Do you also talk about brushing teeth and body washing in your lessons?

Yes, I explain how and why to brush, including brushing the tongue and sides, not just the front teeth. I also teach that you should brush after eating, not before.

18. Do most children have access to a toothbrush and toothpaste?

Many do, but not all. Especially those from poorer families. Some are afraid to ask their parents for hygiene products.

19. How often do you encourage children to brush their teeth?

I advise them to brush two to three times per day, after meals and before going to bed.

Support and safety

20. Is there someone at school that children can go to if they have personal or hygiene-related problems?

Yes, they come to me. Some girls are scared of their parents and feel safer speaking to me.

21. Do you give any tips or advice to parents about hygiene at home?

Not formally. But I sometimes hear stories from the girls about their home situation. I try to support where I can.

22. What kind of support would you like to have to improve hygiene education at this school?

More funds, better access to materials like posters, soap, and menstrual products. Also internet or a projector would really help for showing videos.

Open questions and recommendations

23. What do you think is the biggest hygiene challenge at this school?

Access to resources. And motivating students to care and follow through. Also, many parents are not supportive at home.

24. What tips would you give us if we want to do a workshop or activity about hygiene with the girls?

Make it interactive. Use visuals, songs, or fun games. Focus on building confidence and normalizing conversations about hygiene.

25. Would you recommend doing a focus group, or do you think a creative activity would work better?

A creative activity would probably work best. Girls open up more when they feel relaxed and engaged.

26. Are there any topics that are important to talk about, but maybe not often discussed?

Yes: low self-esteem, body image, and how hygiene connects to mental health. Also, how to ask for help when they feel uncomfortable.

10.4 Appendix C: Sticker



LET'S STAY CLEAN, STAY HEALTHY!



BRUSH YOUR TEETH

- Every morning & evening
- For 2 minutes
- Use a clean toothbrush



WEAR CLEAN CLOTHES

- Wash with soap & water
- Keep your school uniform clean



WASH YOUR BODY

- Every day
- Use soap & water



WASH YOUR HANDS

- Before eating
- After using the toilet
- After playing outside



KEEP SURROUNDINGS CLEAN

- Pick up trash
- Keep home, classroom & playground clean



10.6 Appendix E: Basic hygiene booklet



TABLE OF CONTENTS

1. HYGIENE HERO

2. HAND WASHING

3. BRUSHING TEETH

4. BATHING THE BODY

5. WASHING CLOTHES

6. CLEAN ENVIRONMENT





Welcome, Hygiene Hero!

My name is Nanyonjo, and I'm your
Hygiene Hero.

Together, we will learn how to keep our
bodies clean, stay healthy, and feel
proud!

Are you ready to become a Hygiene Hero
too? Let's go!





SUPERPOWER 1: WASHING HANDS

WHY DO WE WASH OUR HANDS?



Because hands carry **GERMS** that can make us sick!

WHEN SHOULD WE WASH OUR HANDS?



Before and after eating



After using the toilet



After playing outside



When hands are dirty

HOW DO WE WASH OUR HANDS?



Follow the 6 steps on the next page!



EVERYDAY HYGIENE

6 STEPS TO THOROUGH HAND WASHING

DON'T SKIP ANY STEP!



1.WET

WET YOUR HANDS
WITH CLEAN
WATER.



2.USE SOAP

LATHER YOUR
HANDS BY
RUBBING IT WITH
SOAP.



3.SCRUB

SCRUB YOUR HANDS,
IN BETWEEN YOUR
FINGERS, AND UNDER
YOUR NAILS FOR AT
LEAST 20 SECONDS.



4.RINSE

RINSE YOUR
HANDS UNDER
CLEAN RUNNING
WATER.



5.DRY

DRY YOUR HANDS
USING A CLEAN
TOWEL OR TISSUE.
YOU CAN ALSO
AIR-DRY THEM.



6.REPEAT

WASH YOUR HANDS AS
OFTEN AS NECESSARY,
ESPECIALLY BEFORE
AND AFTER HANDLING
FOOD.





SUPERPOWER 2: BRUSHING YOUR TEETH

WHY DO WE BRUSH OUR TEETH?



To keep our mouths fresh and to stop holes (cavities) from hurting our teeth.

WHEN SHOULD WE BRUSH?



In the morning after breakfast



At night before going to bed

HOW DO WE BRUSH OUR TEETH PROPERLY?



Follow the 8 simple steps on the next page!



HOW TO BRUSH YOUR TEETH

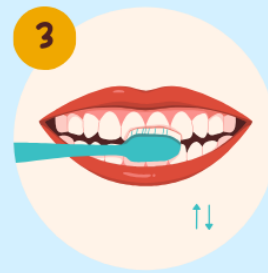
FOLLOW THESE 8 SIMPLE STEPS:



Apply a pea-sized amount of toothpaste to your toothbrush.



Brush the outer surfaces of your teeth using gentle circular motions.



Continue brushing the outer surfaces with up-and-down motions.



Brush the inner surfaces using up-and-down strokes.



Don't forget to brush the chewing surfaces.



Gently brush your tongue to remove bacteria and freshen your breath.



Rinse your mouth thoroughly with water.



Smile! You've successfully brushed your teeth.





SUPERPOWER 3: WASHING YOUR BODY

WHY DO WE WASH OUR BODIES?

- To remove dirt, sweat, and bad smells!
- To stay healthy and happy!

HOW OFTEN?



EVERY DAY !!!

WHAT DO WE NEED?

- Clean water
- Soap
- A sponge or cloth

WHAT SHOULD WE WASH WELL?

- Armpits
- Feet
- Hands and face
- Bottom and private parts





SUPERPOWER 4: WEARING CLEAN CLOTHES

WHY DO WE NEED CLEAN CLOTHES?



Dirty clothes can carry germs and make our skin itchy or smelly.

WHAT SHOULD WE DO?

- Wash clothes with soap and water
- Dry them in the sun
- Change your underwear and clothes every day



SUPERPOWER 5: KEEP SURROUNDINGS CLEAN

WHY IS IT IMPORTANT TO CLEAN OUR SPACE?



A clean home and school help us stay safe from sickness.

WHAT CAN WE DO?

- Sweep the floor
- Pick up litter
- Keep the toilet clean
- Throw rubbish in a bin
- Keep home, classroom and playground clean





Name hygiene hero: _____

Match

Draw a line from picture on left to the matching picture on right.



•



•

Wash your hands
with soap!



•



•

Brush your teeth
every day!



•



•

Keep your clothes
clean!



•



•

Take a full body
wash!

**A TEACHER'S
GUIDE FOR
HYGIENE
EDUCATION IN
UGANDA HANDS
FOR HOPE**



TABLE OF CONTENTS

1. Introduction

2. How to teach hygiene

3. Lesson plans

4. Workshop activities

5. Evaluation and reflection

6. Theory background



INTRODUCTION

Good hygiene practices are essential for children's health and development. This guide helps teachers introduce key hygiene topics to pupils in an engaging and age-appropriate way. By using this booklet, you will support students in becoming proud "Hygiene Heroes" in their school and community.

THE GOAL OF THIS GUIDE:



To empower teachers with practical and theoretical knowledge to guide hygiene sessions effectively in Ugandan primary schools.



INTRODUCTION

Why hygiene matters?

- Poor hygiene is a leading cause of illnesses like diarrhea, skin infections, and intestinal worms.
- Ill health results in missed school days, decreased focus, and lower academic performance.
- Teaching hygiene instills habits that impact entire communities.
- Improves school attendance and concentration.
- Promotes self-esteem and social confidence.
- Encourages responsibility and pride in health.

Uganda-Specific Context

- Many rural areas in Uganda have limited access to clean water and sanitation.
- Common hygiene-related issues include open defecation, poor menstrual hygiene management, and lack of handwashing facilities.
- Integrating local customs and language ensures lessons are well received.



HOW TO TEACH HYGIENE

Age-Appropriate Methods

- Use simple language and demonstration for younger children.
- Involve older students in peer teaching and hygiene clubs.

Recommended Techniques

- Songs and Chants: Reinforce steps for handwashing and brushing teeth. (Wash your hands on the song Baby Shark)
- Storytelling: Create characters like “Clean Kid” or “Toothbrush Tim”
- Roleplay: Act out good and bad hygiene habits.
- Visual Aids: Posters and cartoons with relatable characters.
- Games: Hygiene relay races, sorting clean vs dirty items, flashcard quizzes.



LESSON PLANS



Each week focuses on one major hygiene theme. Adjust to fit the school schedule and resources.

Week 1: Hand Hygiene

- Learn when and how to wash hands.
- Build a tippy tap using local materials.
- Practice 7-step handwashing method.

Week 2: Oral Hygiene

- Brushing teeth twice a day.
- Make a Toothbrush Calendar.
- Group brushing demonstration.

Week 3: Body Washing

- Clean all body parts daily.
- Story: “Anna the Soap Star”
- Label a cartoon with parts to wash.



LESSON PLANS

Week 4: Clothing Hygiene

- Wear clean clothes daily.
- Sorting activity (clean vs dirty clothes).
- Learn how to wash and dry clothes properly.

Week 5: Clean Environment

- Keep latrines, classrooms, and homes clean.
- School clean-up campaign.
- Draw posters about protecting health through cleanliness.



WORKSHOP ACTIVITIES

Build a Tippy Tap

- Teach students how to create a low-cost handwashing station with jerrycans, string, and sticks.

Hygiene Quiz Competition

- Create teams and ask questions related to topics covered.
- Reward winners with stickers or Hygiene Hero badges.

Puppetry Session

- Perform a puppet show titled “The Adventures of Clean Kid”
- Characters: Dirty Dan, Soap Sally, Toothbrush Tim.
- Themes: Clean vs dirty habits, how germs spread, how to stay safe.



THEORY BACKGROUND

Germ Theory Simplified

- Germs are tiny invisible creatures that make us sick.
- They live on our hands, mouths, skin, and in dirty places.
- Soap and water remove them.

UNICEF/WASH Principles

- Everyone has the right to water, sanitation, and hygiene.
- WASH focuses on safe water access, good sanitation, and hygiene education.
- Promotes dignity, health, and equality.

Cultural Sensitivity and Local Adaptation

- Respect local norms and traditions.
- Involve community elders and parents.
- Use local languages like Luganda when needed (especially for little children)



THINGS TO KNOW

KEY INTERNATIONAL HYGIENE DAYS



Incorporating global health days into your lessons makes hygiene education more meaningful and timely.

March 22: World Water Day

Focus: Importance of clean and safe water.

Suggested Activity: Poster-making or discussion on water sources at home.

April 7: World Health Day

Focus: Promoting general well-being and healthy habits.

Suggested Activity: Group talk about “What makes us feel healthy?”



THINGS TO KNOW

May 28: Menstrual Hygiene Day

Focus: Breaking the stigma and improving access to menstrual products.

Suggested Activity: Awareness session for older girls, inclusion of boys to promote understanding.

October 15: Global Handwashing Day

Focus: Practicing effective handwashing with soap.

Suggested Activity: Handwashing demonstrations and competitions.

November 19: World Toilet Day

Focus: Safe and respectful sanitation access.

Suggested Activity: Talk about how to keep school latrines clean.



THINGS TO KNOW

OTHER USEFUL TEACHER TIPS

- **Hygiene Monitoring**
 - Note who washes their hands or brushes their teeth. Reward with a 'Hygiene Star' sticker or badge.
- **Involve Parents**
 - Send messages home about hygiene habits. Ask children how they are doing at home.
- **Local Partnerships**
 - Collaborate with local health workers or NGOs for workshops.
- **Visual Learning**
 - Use pictures, icons or drama for young children.
- **Language Tip**
 - Use local words (e.g. Luganda: 'Naza engalo' = I wash my hands).



SUGGESTED UGANDAN RESOURCES

- Ministry of Health Uganda: www.health.go.ug
- UNICEF Uganda – Hygiene Guidelines: www.unicef.org/uganda
- WaterAid Uganda (WASH): www.wateraid.org/ug



**LET'S RAISE A
GENERATION OF
PROUD, SMART,
AND HEALTHY
HYGIENE HEROES!**



LET'S STAY CLEAN, STAY HEALTHY!



BRUSH YOUR TEETH

- Every morning & evening
- For 2 minutes
- Use a clean toothbrush



WEAR CLEAN CLOTHES

- Wash with soap & water
- Keep your school uniform clean



WASH YOUR BODY

- Every day
- Use soap & water



WASH YOUR HANDS

- Before eating
- After using the toilet
- After playing outside



KEEP SURROUNDINGS CLEAN

- Pick up trash
- Keep home, classroom & playground clean

