

4 Jakarta's impoverished kids lesson series: 10 take-home hygiene messages

Mindy Weimer, Yayasan Tirta Lestari
Mita Sirait, WatSan Action

Context

This case study focuses on WatSan Action's hygiene promotion program implemented by a partner non-governmental organisation, the Yayasan Tirta Lestari, with scavenger communities in Jakarta, Indonesia. WatSan Action recognised that to effectively address the water and sanitation issues of the urban poor, basic hygiene education had to take place. For example, if poor people of Jakarta still use unclean cups they may get diarrhoea even if they have safe drinking water sources.

Though there is an obvious need for basic hygiene education, there was a lack of appropriate material for such an audience.

As WatSan Action began developing and conducting hands-on activities to communicate a few simple messages geared towards water and sanitation, it became clear that personal 'take-home messages' could not be overlooked. Additional topics were highlighted when, for instance, children were coughing and sneezing without regard to covering their mouths during lessons on the water cycle.

After five years of refining a list of take-home messages and accompanying activities, WatSan Action created a manual for training-of-trainers to improve methods for teaching children in poor Indonesian communities about environmental and personal health and hygiene. The aim of our 10 take-home hygiene messages project is to teach children practical ways in which they can change their habits to improve their living conditions.

Background

In the past decade, the notion of environmental health has flourished throughout the international community. However, the city of Jakarta still experiences major challenges managing smog, garbage and water pollution. The lack of preventive education, compounded by relatively weak environmental controls, has turned the tropical city into one of the most polluted on the planet.

The conditions of the millions of poor people living in slums throughout Jakarta show the true face of urban poverty. They suffer from inadequate health systems and lack access to safe water supply and sanitation. Compared to the average population, slum-dwellers have shorter life expectancies, higher infant and maternal mortality, malnutrition and health problems such as dysentery and other waterborne diseases (UN-Habitat, 2006).



Sanitation Coverage:		Water Coverage:	
Rural	Urban	Rural	Urban
36%	67%	71%	89%

JMP 2010



Practicing handwashing with soap

YAYASAN TIRTA LESTARI

Acknowledgements

The author would like to thank the former Public Health Promoters from the Yayasan Tirta Lestari team, YOSHUA Situmorang, Mita Sirait and Tetty Naibaho. Also, volunteers Tricia Wendt and Ashley Kidd, who helped with the research and editing of our manual. A special thanks to Dr. Vikki Uhlmann and Rebecca Weimer, both of whom were instrumental in revising and formatting the manual. Additional thanks to Sika and Chevron for their financial contributions that made this work possible. And lastly, to the families who have participated in our Public Health Promotion Program, we appreciate your involvement and wish you life-long health.



Counting and examining teeth

YAYASAN TIRTA LESTARI

WatSan Action supports the work of the local foundation Yayasan Tirta Lestari's Public Health Promotion (PHP) Programme, which is active in the slum communities in Jakarta. One of the projects of the PHP Programme is to increase the environmental and personal health and hygiene of impoverished children. Many of these children do not go to school, and their parents scavenge trash for a living. Most children do not have toothbrushes, trash bins, soap or other supplies for improving hygiene.

To support action on public health issues of the poor in Jakarta, local foundations like Yayasan Tirta Lestari are taking a community approach to educate and empower. However, effective government action is also needed to sustain progress. Although education is secondary to providing for basic needs, it can be a formidable tool in reducing poverty (IEP, 2008).

The approach

The content for teaching impoverished children about environmental and personal health and hygiene is broken down into ten lessons, each focused around one take-home message. Each lesson in the series is designed with three related questions. Considering that learning by doing is more effective than learning by reading or hearing (Britton, 1996), activities are suggested for each concept question to engage students in learning.

The lessons each last about 1 to 1½ hours, and are usually conducted once per week in a specific order. Usually six months are needed to complete the series, to allow time for household surveys, holidays and evaluation. Lessons were designed for classes of 15 children. They were limited to this number for more effective learning and monitoring of the students. Only children between the ages of 8 to 12 years old who showed willingness to participate were included.

Each of the lessons includes a verbal quiz that covers the three concepts learned about that lesson's topic. Prize incentives related to the topic (for example, toothbrushes) are awarded to correct respondents. The ten lesson topics in the program are listed below, with their take-home hygiene messages and quiz questions. Each topic was chosen taking into consideration whether the children would understand and would be able to make changes, however small, to improve their hygiene and environment.

Lesson 1 – Introducing germs

Germs can cause you to get sick, so it is important to learn about personal hygiene habits that will help protect your health.

- 1) What are germs and why should we know about them?
- 2) How can we protect ourselves from germs?
- 3) Where are there likely to be the most germs living in your surroundings?

Lesson 2 – Washing hands with soap

Handwashing with soap regularly, especially before handling food and after going to the toilet, will prevent germs from spreading and causing sickness.

- 1) Why are clean hands important?
- 2) How do we keep our hands clean?
- 3) When are the important times to wash your hands with soap?

Lesson 3 – Fingernail fun

Germs get caught under your nails, so it is important not to bite your nails and to keep them clean and short.

- 1) Why is it important not to bite your nails?
- 2) Why should you keep your nails clean and short?
- 3) How can we keep our nails clean and short?



Determining food groups

YAYASAN TIRTA LESTARI

Lesson 4 – Brushing teeth matters

Brush your teeth every day after eating and before bedtime to keep your teeth healthy and prevent plaque and bad breath.

- 1) Why are clean teeth important?
- 2) How do we clean our teeth?
- 3) How can we keep our teeth healthy?

Lesson 5 – Snack smart

Snacking from the five major food groups helps to balance your diet and consequently improve your well-being.

- 1) What are the five basic food groups?
- 2) Why is it important to eat a balanced diet?
- 3) What are some examples of smart snacks?

Lesson 6 – Clean hair & skin

Keep your hair and body clean by washing daily to prevent skin and scalp problems.

- 1) Why are clean skin and hair important?
- 2) How do we keep our hair clean?
- 3) How do we keep our skin healthy?



Creating a story of a water droplet through the water cycle

YAYASAN TIRTA LESTARI

Lesson 7 – Drinking safe water

Just because water looks clean does not mean that it is drinkable, so make sure your drinking water is treated and stored properly at home to help prevent getting sick.

- 1) Can you tell by looking at water if it is clean enough to drink? Why?
- 2) What happens if you drink unclean water?
- 3) What can you do in your home to keep your drinking water safe?

Lesson 8 – The water cycle

Our freshwater is scarce, so we must preserve it, not pollute it, and encourage other people to do the same.

- 1) Where does freshwater come from?
- 2) How does littering affect our water sources?
- 3) What can we do to conserve our freshwater sources and keep them clean?

Lesson 9 – Reduce-Reuse-Recycle

You can help save money and the environment at the same time by reducing, reusing and recycling.

- 1) How can we reduce our trash?
- 2) How can we reuse our trash?
- 3) How can we recycle our trash?

Lesson 10 – Breathing & re-greening

Minimising trash-burning and conserving and planting trees are ways you can help your lungs by reducing air pollution.

- 1) How should we manage our trash?
- 2) What happens if we burn trash?
- 3) How can we help improve the air we breathe?

Examples of activities include songs about washing, “I Spy” and “Tag” games about germ messages, stories about freshwater,

and many other engaging ways to help the students grasp the take-home hygiene messages.

Monitoring

To learn about the impact and progress made with students and their families, as well as the teacher, the measures to monitor the results of this project include: (1) household surveys, (2) short verbal quizzes at the end of each lesson, and overall written multiple-choice quizzes at the beginning and end of the lesson series, and (3) an on-going teacher journal. Such measures are useful for project development, donor reporting, and beneficiaries’ sense of achievement.

Impact and outcomes

In 2006, six classes were conducted in six different slum communities. During 2007, an additional community was added and seven classes were conducted. Families in one community were evicted from their homes in 2008; therefore only six classes were conducted that year. In 2009, a lesson series for adults was created as well as a class for Cadres-teacher training (we call volunteer community teachers ‘Cadres’). As a result, the number of children’s classes was reduced to four because of limited resources. During the first quarter of 2010, trained Cadres each taught three lesson series. Thus, this case study is based on the experience of conducting 26 lesson series classes.

Unfortunately the monitoring measures were not completely in place for the majority of the classes conducted. However, the household surveys conducted before and after the program for three classes during 2009 show an average improvement in understanding

and observed practice of 37% (40% in Bintaro Baru, 37% in Cilincing, 34% in Teluk Gong 1 and 35% in Teluk Gong 2). Teluk Gong 1 students’ households were re-surveyed three months after the end of the lesson series in order to measure retention. Results show that there was an improvement in understanding and practice of only 23% from the initial survey (representing a decrease of 11% after three months).

Results highlighted the need to teach parents similar material. Though the parents were keen for their children to participate, they did not support their children’s new hygiene practice at home. The majority of feedback gathered was that they did not understand the messages themselves so they could not help their children learn. Despite the illustrated handouts of the 10 take-home hygiene messages given to the parents during the initial survey, and the reminders throughout the lesson series sent home through the students, the need to develop a lesson series for adults became apparent. Yayasan Tirta Lestari has since developed an appropriate lesson series for adults and conducted four classes to date, though the results are not covered in this paper.

Voices from the program

I hope these Cadres could spread the lesson they have had to all community so everyone can implement the health and hygiene improvement behaviour. – Community Leader, Pak Miftah

There are some neighbours who want the same project implemented in their area, because they think this is a good project for their kids. – Ibu Tan, Cadres Teacher

Thank you very much for your support to facilitate us with knowledge and opportunity to experience and implement a better life quality through PHP activities. – Ibu Tan, Cadres Teacher

My son, Ridho, never forgets to wash his hands after learning the handwashing with soap lesson. – Ibu Eva, Parent

Before these classes, Nanda never washed his hands before a meal. Now he always does it. – Ibu Tati, Parent

I’m still doing garbage separation at home. All my family members do. – Helmy, Public Health Promotion Programme student alumnus



Washing hair together

Successes and challenges

The fact that with each class the children's enthusiasm increases and more children want to join the program is a measure of project success. Parents and students increasingly ask to participate and for additional classes to be added. This has also been a challenge. During lessons, for example, many other children in the community look and continuously want to get involved. To stop curious younger children from disturbing the class, crayons and illustrations of that day's take-home hygiene message are provided to them during the lesson period.

After presenting this project at local conferences, the Indonesian government and various institutions have expressed interest in applying this project in the communities where they work. While this is an encouraging mark of success, it is also challenging

because the project has been evolving and growing, without sufficient resources to formalise and complete documentation so that the project can be taken up by other institutes.

Moving from having the Yayasan Tirta Lestari staff teaching the lessons, to having trained volunteer community members (Cadres) teaching, is a major sign of project success. This has also proven to be challenging as the Cadres need to first learn the basic hygiene messages, as well as develop basic teaching skills. Nonetheless, the Cadres' training was a worthwhile and necessary step in expanding the program. Their results will be monitored.

Project sustainability

This project was based on educating the future generation in Jakarta about healthy habits to improve their environmental and personal health and hygiene. Considering the transient lifestyle of "squatters" who live everyday with the risk of being evicted, education was the deliberate focus of our intervention.

Furthermore, this lesson series was documented in a manual for the purpose of creating a tool for public health implementers to teach basic environmental and personal health and hygiene. The manual is supplementary material for training of trainers conducted by Yayasan Tirta Lestari. The goal is to stimulate other public health implementers through the training of trainers to create a longer-lasting network of support. This is more useful than simply distributing the manual.

This project was designed to be as low-cost as possible, to maximise replication. The

training manual includes a list of supplies and equipment needed (such as shampoo, buckets, crayons, and so on) as well as annexes of support material. The approximate supply cost to run one class for 15 students over six months is US\$1000. This figure includes suggested prize incentives, which although not strictly necessary, positively improve results by encouraging attentiveness while at the same time providing hygiene supplies. Additional costs for equipment are approximately US\$200; largely for a camera and portable handwashing station. The relative operational costs, such as transportation and staff expenses, must also be accounted for by an implementing organisation.

Conclusion

Lesson learned

The activities in the lesson series were designed for children 8 to 12 years old. Though the material is indeed appropriate for that age range, running the class with students of mixed ages from 8 to 12 years old has been challenging because they learn at different speeds. The notable lesson learned was to run parallel classes with children ages 8 to 10 years and another with children aged 10 to 12.

Recommendations

The communities in the program have an average of 300 households. Classes were conducted one at a time. To improve the impact of the lesson series for children at the community level, it is recommended to accommodate all students who meet the criteria in one community and run several classes. As resources allow, it is

recommended to provide these classes during a concurrent timeframe to stimulate greater understanding and learning across the entire community, rather than just with a relatively small number of children.

The way forward

Looking forward, the next steps are to work with volunteer Cadres to continue teaching more classes and to collect more data measuring the impact of this project over time. It is also planned to expand to local clinics, local youth groups and grade schools. Linking with other public health practitioners to share lessons learned would be another valuable way forward.

No two communities are exactly alike; therefore, finding sustainable solutions tailored to each unique group is not a simple task. Nonetheless, we hope this project will be useful in furthering effective basic public health services for underserved urban communities in Indonesia.

References

Manasco, B. (1996). *Leading Firms Develop Knowledge Strategies*. Knowledge Inc.

UN-Habitat, Schlein, L. & Kruger, S. (2006). *Urban poor worse off than rural poor but good policies can reduce slums*. City Mayors Society. Accessed at: http://www.citymayors.com/society/urban_poor.html.

van der Berg, S. (2008). *Poverty and Education - Education Policy Series*. The International Institute for Educational Planning (IIEP) & The International Academy of Education (IAE). Accessed at: <http://unesdoc.unesco.org/images/0018/001817/181754e.pdf>.



Planting anti-mosquito plants

YAYASAN TIRTA LESTARI