



Chapter 1

The value of hygiene

Many of us take good personal hygiene and access to basic sanitation facilities such as clean water or a toilet for granted. But what happens when your access is limited? What if you do not have access to clean water or a toilet, or cannot afford hygiene products? Personal hygiene is a problem strongly linked to education and socioeconomic development. Good hygiene practices must be guaranteed to enable universal participation in education, the workplace and the development of society as a whole.

Sanitation with hygiene at the center is a universal human right. This human right “entitles everyone to sanitation services that provide privacy and ensure dignity, and that are physically accessible, affordable, safe, hygienic, secure and socially and culturally acceptable” (Realizing the Rights to Water and Sanitation Handbook, Catarina de Albuquerque).

As part of its 2030 Agenda, the United Nations (UN) set as Goal 6 of the 17 Sustainable Development Goals (SDGs) the ambition to “Ensure access to water and sanitation for all”, including the target to “achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.” This effectively places access to sanitation and hygiene alongside goals such as eliminating poverty and ending hunger. Furthermore, good hygiene and challenging taboos surrounding personal hygiene can contribute to reaching other goals, such as gender equality (Goal 5) and health and well-being (Goal 3).

The UN estimates that 2.4 billion people worldwide lack access to sanitation facilities. Around the world, social norms also often work against, rather than for, progress in hygiene. We therefore need to keep showing why hygiene matters for personal, social and economic development. This chapter will do so by focusing on the value that hygiene creates in terms of health and well-being, and on the repercussions of poor hygiene on individuals – especially women and girls – as well as on society and the economy.



WSSCC/Katherine Anderson





As many as 1.7 million people die every year from diarrheal diseases and, of these, 90 percent are children under the age of five.

The World Health Organization

Hygiene and health - a matter of life and death

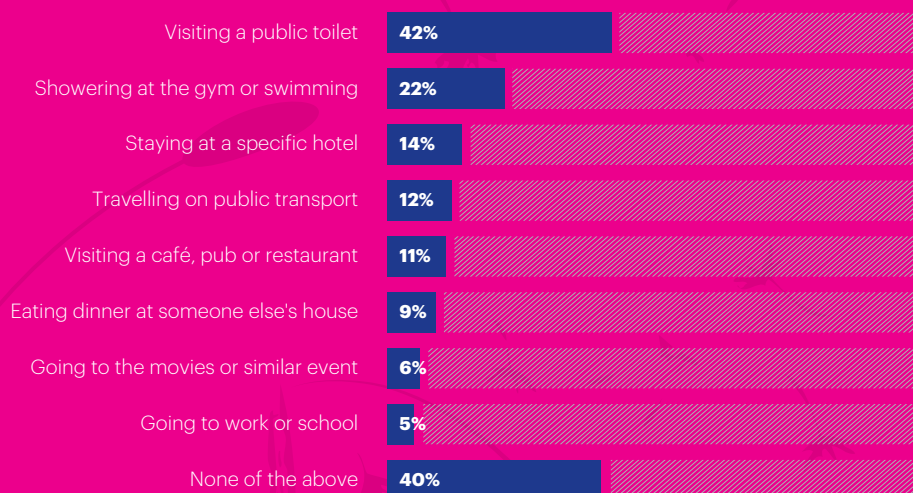
Diseases associated with poor sanitation and unsafe water accounted for about 10 percent of the global burden of disease, according to the World Health Organization (WHO). As many as 1.7 million people die every year from diarrheal diseases and, of these, 90 percent are children under the age of five, living predominantly in developing countries.

In addition to small children, the most vulnerable members of society are women. Researchers from, among others, WaterAid, UNICEF and WHO put the number of women that die from childbirth complications each year as high as 289,000 globally. In their collaborative paper, *From Joint Thinking to Joint Action: A Call to Action on Improving Water, Sanitation, and Hygiene for Maternal and Newborn Health* (PLOS Medicine, 2014), they argue that

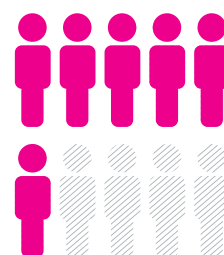
despite improvements in healthcare, new mothers and newborns are still dying because a reliable supply of safe water, good hygiene practice and adequate toilets are often not present.

The value of good hygiene is not restricted to basic facilities, or developing countries. Several scientific studies show the value of good hand hygiene in reducing the number of hospital acquired infections, such as MRSA (Methicillin-resistant *Staphylococcus aureus*, a bacteria that is resistant to many antibiotics), which is also a significant problem in modern healthcare in one word systems. In the US, the Centers for Disease Control and Prevention estimated that there were 722,000 cases of hospital-acquired infections in the country in 2011. Of these, 75,000 patients died.

Activities people refrain from due to concerns about a lack of hygiene or cleanliness:



6 in 10



Have refrained from activities due to concerns about lack of hygiene or cleanliness.

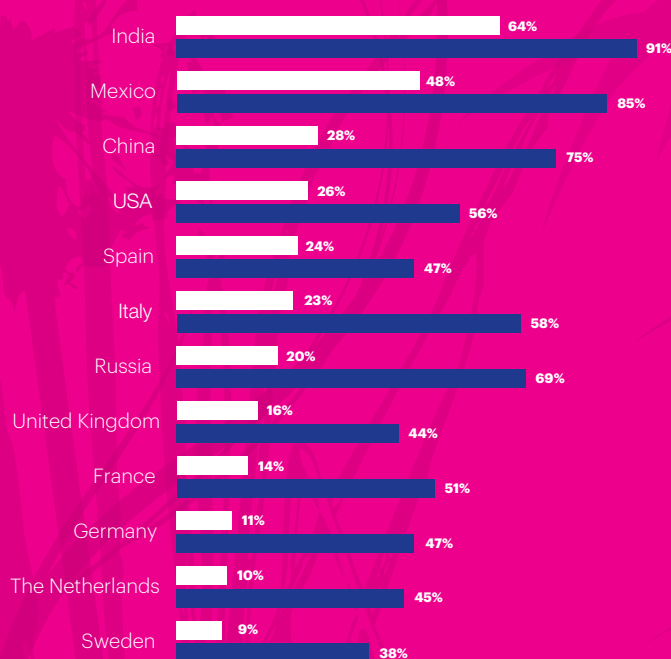
Close link between hygiene concerns and effect on public life:

Hygiene concerns

Worry about becoming ill due to poor hygiene "All of the time" or "Often".

Effect on public life

Have avoided places/refrained from activities due to concerns about hygiene levels.



An average of 6,500 Indian Rupees per person (about USD 97) was lost in India annually due to a lack of cleanliness and hygiene.

The World Health Organization

Hygiene - a catalyst for economic growth

Hygiene - or the lack thereof - impacts participation in education, workplace productivity and the wider economy. This spans from the spread of disease due to poor hand-washing practices, to absenteeism among women due to the lack of toilets in the workplace, or incontinence sufferers and relatives taking care of them.

“Hygiene in the workplace is very important for women. Good hygiene contributes to acceptable working conditions and the reduction of poor sanitation and communicable diseases. Appropriate facilities, access to information and supportive work environments ensure a healthy and productive work force,” says Shauna Olney, Chief of the Gender, Equality and Diversity Branch of the International Labor Organization (ILO)

There is a clear link between access to facilities, and the ability to manage menstrual hygiene. “Assuming at least half of the 946 million people globally who lack any kind of facility and defecate in the open are female, a conservative estimate would suggest that at least 500 million women and girls lack adequate facilities for menstrual hygiene management,” reads the 2015 edition of *Progress on Sanitation and Drinking Water* by WHO and UNICEF.

A 2013 WSSCC report estimated that 73% of female factory workers in Bangladesh miss an average of six days of work – and pay – every month because of menstruation. Where access to sanitation services and products is low, and often coupled with societal stigma around menstruation, menstruation also often means missed school for girls. UNICEF estimates that 10 percent of African girls don’t attend school at all during their periods. There are also indications of increased dropout rates and missed school work for girls, due to infections caused by unsanitary menstrual products or practices, such as using old rags.

Concern over the lack of hygiene in public places such as washrooms, public transport or even hospitals can seriously limit our participation in society. The Hygiene Matters Survey shows that

six out of ten respondents had refrained from certain activities due to concerns over a lack of hygiene or cleanliness. The results confirm that the more people worry about becoming ill due to poor hygiene, the more they will stop using facilities such as public transportation or visiting restaurants, gyms and even friends’ or relatives’ homes. Other reports show that children refrain from using school toilets, partly due to concerns over cleanliness. A 2009 doctoral thesis by Swedish specialist nurse Barbro Lundblad showed that 16% of schoolchildren avoided urinating at school, and 63% would never consider defecating in a school toilet, mainly due to poor cleaning.

Improving sanitation has often been low on the list of priorities for governments. “There are so many other pressing needs for the attention of governments: food supply, education, medical treatment and dealing with war and conflict,” in the words of the WHO (10 Things You Need to Know About Sanitation, WHO in cooperation with UNICEF and WSSCC). However, there are signs that governments are starting to understand the socioeconomic value of hygiene.

An average of 6,500 Indian Rupees per person (about USD 97) was lost in India annually due to a lack of cleanliness and hygiene, according to the World Health Organization (WHO). “Swachh Bharat Mission”, or Clean India Campaign, (a large-scale government initiative focused on providing sanitation and hygiene facilities to all Indian citizens) would make a significant impact on public health and in safeguarding the income of the poor, ultimately contributing to the national economy” says Narendra Modi, Prime Minister of India.

Hygiene - a precondition for personal development

Even when not directly related to disease, the ability to maintain a socially acceptable level of personal hygiene directly impacts the well-being, dignity and participation of an individual in society. In developing countries, different requirements for men and women with regards to modesty, personal security, and the disproportionate burden of unpaid labor are often linked to hygiene. This results in women and girls being excluded from school, work and community activities.

Women and girls living in the poorest rural areas are usually the ones that are responsible for managing the household water supply and will often have to walk several kilometers to collect water for their families. Women also tend to assist in meeting the hygiene needs of men, children and the elderly while being responsible for keeping the home environment clean. Improved access to water and sanitation will be transformative for these women and girls, giving them more time for education, participation in the community, and engaging in activities that generate income for their families and societies.



Also in developed countries, lacking the means or opportunity to take care of your personal hygiene impacts the ability to improve your social situation and well-being.

Personal security is a less discussed factor. “Women and girls who are visibly unwashed may be more vulnerable to personal violation, since [un]cleanliness is a signifier of social vulnerability and poverty more generally. These needs are rarely reflected in public sanitation projects or in current sanitation promotion efforts,” write Burt, Nelson and Ray in the 2016 UN Women discussion paper *Towards Gender Equality Through Sanitation Access*.

Also in developed countries, lacking the means or opportunity to take care of your personal hygiene impacts your social situation and well-being. Many people can relate to a situation where you are far from a toilet and need to go, or when there is nowhere to dispose of a sanitary pad. The latter forces women and girls to hide used pads in their purse or school bag which is a source of huge indignity, according to WSSCC research.



Creating value for individuals and society

Incontinence is a condition that is rarely spoken about - despite the fact that it affects 400 million people globally and has a major impact on people's dignity. Access to appropriate solutions not only improves incontinence sufferers' quality of life, it also generates value for society.

Like menstruation and menopause, incontinence is a silent and taboo subject that robs women and men of their dignity, safety and confidence. Ensuring that people receive the right care and are offered suitable solutions can restore dignity and create enormous value. Results from a study of ours and Vinda's* work with incontinence in Beijing, Shanghai and Guangdong in China showed that incontinence, in the absence of suitable solutions, reduces productivity by an average of 12.6 days a year. This is due to factors such as reduced ability to concentrate, reduced self-confidence or reduced ability to perform physical activities. Addressing incontinence also created value for caregivers, who spent an estimated 3.7 hours a week supporting affected family members or relatives. Overall, the same study showed that more than USD 40 million in value had been generated for society in the form of improved work capacity, reduced stress and the prevention of related diseases (*Charting a New Course to Incontinence in China*, 2015).

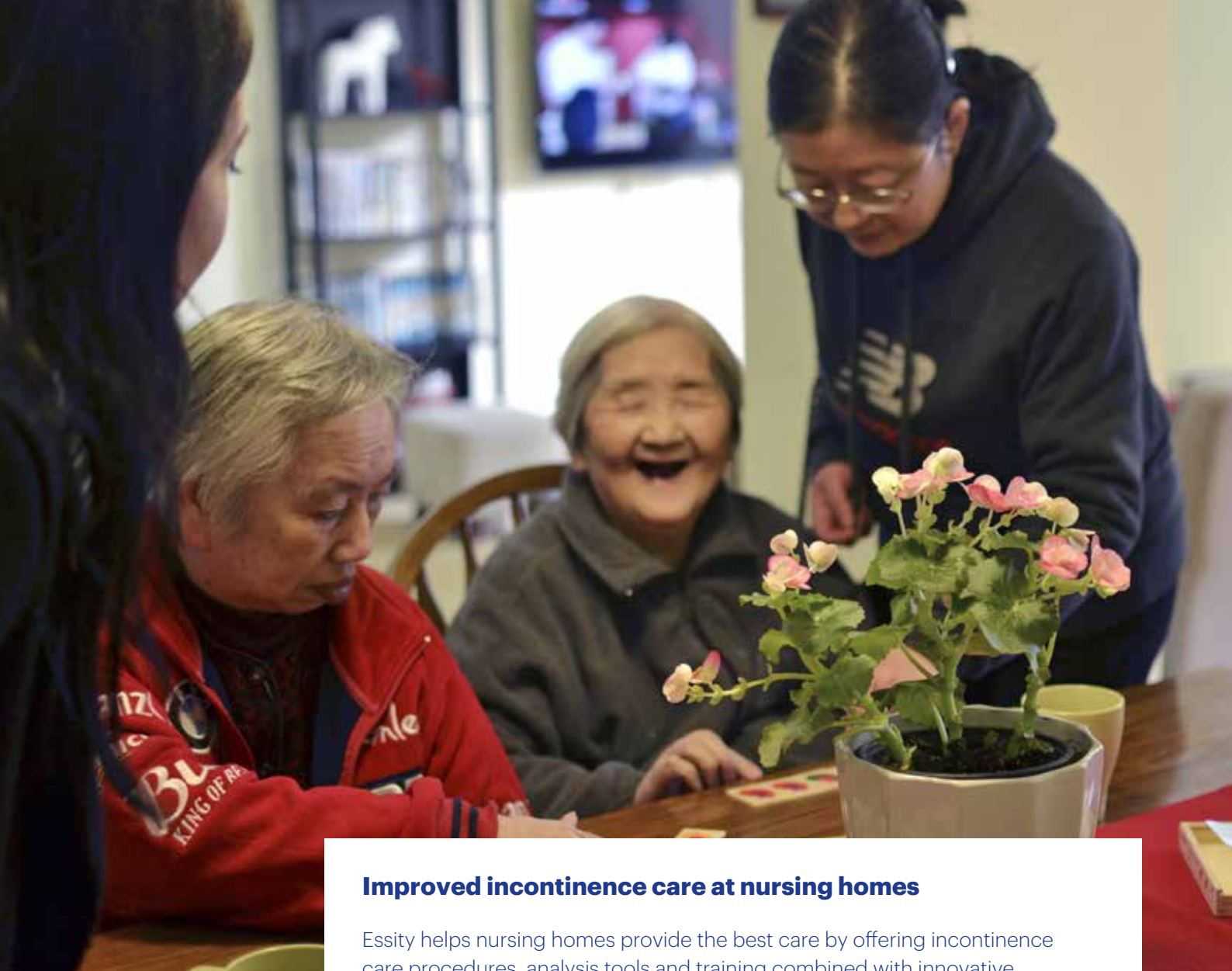
With average life expectancy increasing globally, the world's elderly population is expected to grow more than any other section of the population. This trend will put more pressure on elderly care systems, and an increasing number of people will require homecare. To counter the risks of restrained institutional budgets and untrained home caregivers, flexible and innovative solutions for conditions such as incontinence will be necessary.

WHO has defined incontinence as a set of diseases, and incontinence products have for the first time been included on WHO's Priority Assistive Product list, having important implications for people in need of those products. Better managing conditions such as incontinence through the use of specialist caregivers results in an improvement in the quality of life of community-dwelling elderly, a reduction in costs, and a reduction in time invested by caregivers (*Cost-Effectiveness of Including a Nurse Specialist in the Treatment of Urinary Incontinence in Primary Care in the Netherlands*, Erasmus University, 2015).

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Charting a New Course to Incontinence in China, 2015.

*Essity is the majority owner in Vinda, China's third largest tissue company.



Improved incontinence care at nursing homes

Essity helps nursing homes provide the best care by offering incontinence care procedures, analysis tools and training combined with innovative solutions via its TENA brand. The advantages include improved well-being for the residents, better working environments, a reduction in resource consumption and lower overall costs. A study of 181 nursing homes around the world that have implemented TENA Solutions showed clear improvements in 95% of the cases:

38% less leakage

47% improved skin conditions

44% more time for rewarding care

29% lower cost (related to incontinence care)

37% less laundry

31% less waste

Information based on 181 TENA Solutions case studies around the world, mainly in Europe but also in the US, Canada and China, 2011–2013.

Hand hygiene in kindergartens reduces illness

Educating children in hygiene is a good investment in their health. A joint project with Vinda in Shenzhen, China, showed that good hygiene habits can reduce the risk of childhood diseases such as hand, foot and mouth disease (HFMD) by up to 60%.

Poor hand hygiene is the most common cause of infections in hospitals, but good hand hygiene can also significantly reduce the spread of infectious diseases outside the medical arena. In 2015, along with Vinda, we supported China's first kindergarten hand hygiene intervention program, which aimed to prove how hand hygiene can protect against childhood diseases.

The six-month program covered over 8,000 children and nearly 650 teachers across 18 kindergartens in Shenzhen, China. The research was conducted by the Shenzhen Center of Disease Control and Rotterdam Erasmus University Hospital. Together with Vinda, we supported the program with dispensers, soap and paper towels from Essity's global brand Tork, as well as Vinda anti-bacterial wet wipes. To encourage good hand hygiene habits, the teachers and children at the preschools focused on washing their hands and the children were educated about hand hygiene. They also practiced with the help of "Ella's hand washing adventure," an app developed for the Tork brand to teach children to wash their hands properly to remove dirt and bacteria.

Evaluations of the program showed that it had been very successful. Hand, foot and mouth disease (HFMD) is a common infectious disease among children between the ages of zero and six caused by enterovirus such as EV71 or Cox A16. The program indicated that good hand hygiene habits effectively reduced the risk of HFMD in children by up to 60%.



Good hand hygiene habits effectively reduced the risk of HFMD in children by up to 60%.

Read more about Essity's educational initiatives on pages 40-41.



8,000

kindergarten children

6 months

of hand-washing instruction

60%

reduced risk of hand,
foot and mouth disease

A business case for investments in female hygiene

Women working in factories in developing countries often have low hygiene awareness and poor access to sanitation, leading to serious health issues. But, as this example from Pakistan shows, educating women about their rights and choices is not only good for factory workers' health but also the bottom line.

Female factory workers' health, in addition to their well-being, has a direct impact on the productivity and stability of manufacturing operations often plagued by narrow profit margins, volatile customer demand, and high worker turnover and absenteeism. In this context, workers who are loyal, healthy and educated represent an invaluable resource, making investments in female workers' health likely to deliver significant returns. But what are the best investments to make, and what are the benefits from a business point of view?

HERproject, now referred to as HERhealth, is run by BSR (Business for Social Responsibility), a global nonprofit business network and consultancy dedicated to sustainability. The aim is to empower women working in global supply chains through workplace-based programs. HERhealth focuses on improving health knowledge, behavior and access to health services and personal hygiene products. The program has been successful in creating an enabling environment while also highlighting the business case for prioritizing women's health at work.

At one factory in Karachi, Pakistan, female factory workers were missing up to three days of work a month during their menstrual cycles. Women reported monthly pain, infections and embarrassment due to a lack of knowledge about proper hygiene and limited access to safe products. By educating workers in feminine hygiene and related issues, and persuading factory management to provide subsidized sanitary napkins, significant results were achieved.

Women's increased use of sanitary napkins, with 33% now using them, combined with their increased knowledge of hygienic practices during menstruation reduced health complaints. Rashes and pain, often due to reproductive-tract infections, were reportedly reduced by 11% and 18% respectively.

The health awareness and behavior changes in the factory have also had positive business impacts. Because of changes specific to menstrual health, women reported a 25% reduction in poor concentration in work, 28% less absenteeism related to menstruation, and 33% less difficulty in meeting production targets. Overall, reported absenteeism was 11% lower, with a 24% reduction in the mean number of days absent. The number of women who reported taking the maximum number of allowable days off was reduced by 46%. An initial ROI analysis confirmed that women in the factory worked an average of 2.5 more hours per month during the project period, representing an additional 615 days of work per year. These business impacts translated into a USD 4 return for every dollar invested in the program.



The number of women who reported taking the maximum number of allowable days off was reduced by 46%.



11%

less absenteeism

+2.5

hours worked per month

4 USD

return for every dollar invested