Universal access to hand hygiene

Investing $1 per person per year in hand hygiene could save hundreds of thousands of lives

STAR HEALTH DESK

All households in the world's 46 least developed countries could have handwashing facilities by 2030 if the world invested less than US$1 per person per year in hand hygiene. This would provide basic protection against diseases, avert future outbreaks and prevent hundreds of thousands of deaths.

The World Health Organisation (WHO) and the United Nations International Children's Emergency Fund (UNICEF) launched their 2021 State of the World's Hand Hygiene report on Global Handwashing Day. The report highlighted that promoting handwashing with soap at home costs governments only 2.5 per cent of average government health expenditure in these countries, making it a highly cost-effective investment that provides enormous health benefits for mere pennies.

The report gathered dispersed data sets on hand hygiene access and underlying national policies and investments to highlight lagging progress; and calls member states and supporting agencies to action, offering numerous inspiring examples of change.

Hand hygiene, one of the first lines of defence against the spread of infectious diseases, remains out of reach for billions of people who still lack hand hygiene facilities at home, school, or health care facilities. Globally, three in ten people, or 2.3 billion, lack a handwashing facility with water and soap at home. In addition, 818 million children lacked a handwashing facility with soap and water at school in 2020. Also, health workers in one in three healthcare facilities lacked hand hygiene facilities at the points at which they provide care, placing them all at preventable risk of disease even at the best of times. Almost two billion people depend on health care facilities that don't even have basic water services.

Ramping up action to ensure universal access to hand hygiene facilities is one clear example of the complementarity of getting out of the pandemic, preparing for the next one, and meeting the Sustainable Development Goals. It is certainly a requirement of universal health coverage. Achieving the goal of universal access to hand hygiene will require a dramatic change of gear; the current average pace of progress would have to quadruple to ensure all homes in the world have this access. The same applies to universal access to hand hygiene services in schools by 2030, requiring at least a four-fold increase in the current average rate of progress, with greater acceleration needed in some areas. If current rates of progress continue, by 2030, the world will have reached only 78 per cent coverage of basic hygiene services, leaving 1.9 billion people without the facilities to wash their hands at home.

To speed up progress, governments should prioritise five key actions:

- Good governance through leadership, effective coordination and regulation, including clear policies on handwashing services and behaviours in all settings.
- Smart public finance ensures maximum impact and stimulates investments from households and the private sector.
- Assess current capacity for their hand hygiene policy and strategies, identify gaps and develop a capacity-building system based on the rigorous application of best practice.
- Governments should address the need for consistent data on hand hygiene to inform decision-making and make investments strategic.
- Governments and supporting agencies should encourage innovation, particularly in the private sector, to implement hand hygiene in all settings.

Handwashing is one of the most effective methods for removing germs, avoiding illness, and preventing the spread of germs to others.

HAVE A NICE DAY

Wisdom of true happiness

Dr Rubaiul Murshed

Happiness has long been recognised as a critical part of health and well-being. It is also important to consider how one personally defines happiness. Happiness is a broad term, and factors contributing to this can differ from person to person. The only undisputed truth is 'it generally linked to experiencing more positive feelings than negative'.

Some social scientists like to use 'subjective well-being' when they talk about this emotional state. When general people talk about happiness, they might be talking about feelings of joy and self-satisfaction in life. Here, the upbringing of a person plays an important role. This relates to how satisfied one feels with different areas of one's life, including expectations in relationships and other things that one considers success.

But rather than misjudging things such as money, status, or material possessions as short-term happiness, it is important to understand 'true happiness'. Research into true happiness, carried out by Harvard University, concluded that the people we surround ourselves with and our acceptance into society could positively affect our physical and mental health and help us live longer.

This is because while we are happy involving kindness, forgiveness, and practising the 'culture of giving', the body can produce some happy hormones. For example, 'Dopamine' makes us feel good, 'Serotonin' reduces depression; and 'Endorphins', which make us happy and thus help to reduce physical pain.

Another study has found that perceptions of social support were responsible for 43% of a person's level of happiness.

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HEALTH *bulletin*

Drugs to add in lowing high blood pressure

Adding a new medication is associated with better blood pressure lowering. In drug-treated patients with hypertension whose blood pressure (BP) is inadequately controlled, augmentation strategies include maximising the dose of a currently prescribed antihypertensive medication or adding another antihypertensive drug.

According to a cohort study in the United States, investigators identified 487,000 older hypertensive veterans (age, ≥65; 98% men) whose mean systolic BP was more than 130 mm Hg during two recent visits. In 178,000 of these patients, clinicians intensified drug treatment. In 25%, a new antihypertensive medication was added, and in 75%, the dose of a currently prescribed antihypertensive medication was maximised.

Compared with maximising medication dose, adding a new medication was associated with significantly less adherence to the BP intensification regimen at three months and twelve months. Nevertheless, adding a new drug lowered BP considerably at three months and twelve months (by about 1 mm Hg, on average).

Adding medication class to control BP makes pharmacological sense and can lower the risk for side effects by maximising the dose of a single agent. However, this study shows that the modest improvement in BP control with multiple agents likely comes at the expense of lower adherence to multidrug regimens.

Ultimately, adding drugs for hypertension treatment requires collaborative decision making with patients to simplify medication regimens while controlling BP and minimising adverse effects.

Genome sequencing to identify drug-resistant TB strains

STAR HEALTH DESK

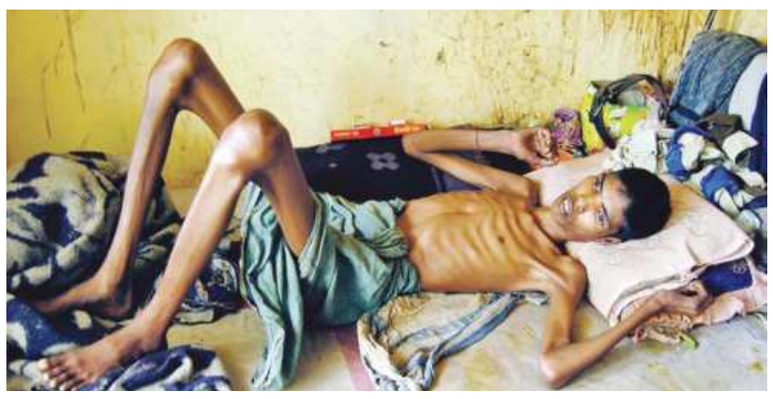
On 20th October 2021, the 52nd Union World Conference on Lung Health (WCOLH) researchers presented data from a study that used genome sequencing to effectively predict tuberculosis (TB) strains susceptible to antibiotics that were likely to develop drug resistance, says a press release.

The researchers looked at drug-susceptible microorganisms for changes that increased the risk of future resistance. "Pre-resistance" mutations confer by targeting bacteria that are more prone to drug resistance; these alterations could help slow the spread of drug resistance. They found that Isoniazid mono-resistance backgrounds have a much higher risk of acquiring further rifampicin resistance than susceptible backgrounds.

A clinical trial led by Médecins Sans Frontières/Doctors Without Borders (MSF) has found that a new all-oral six-month treatment regimen is safer and more effective for patients with Rifampicin-resistant (RR-TB) than the currently accepted standard of care.

The trial compared a six-month regimen including Bedaquiline, Pretomanid, Linezolid and Moxifloxacin (BPaLM) with the locally accepted standard of care. It was reported that 89% of patients in the BPaLM group were cured, compared to 52% in the standard of care group. Another trial was conducted on the feasibility and yield of systematic TB molecular testing in children with severe pneumonia in countries with high tuberculosis incidence.

TB is common in children with pneumonia. Still, it is only



considered if the child has a history of prolonged symptoms or fails to respond to antibiotherapy, thus leading to missed or delayed TB diagnosis. Therefore, the feasibility and yield of systematic TB detection using Xpert MTB/RIF Ultra (Ultra) on nasopharyngeal aspirates (NPA) and stools in children with severe pneumonia were assessed.

Children aged 5 years were followed up for 12 weeks. In this sizeable multicentric study, 7% of children with severe pneumonia were diagnosed with TB in the intervention arm. Combined NPA and stool samples showed high feasibility in this vulnerable population and contributed to microbiological confirmation in 30% of TB diagnoses.

Recently, a trial on the efficacy and safety of a 4-month Rifapentine-Moxifloxacin regimen for tuberculosis in adolescent participants was performed. Persons aged 10-19 with TB account for approximately 10% of the global burden. A randomised, open-label, phase III treatment shortening trial for pulmonary TB compared two high-dose 4-month rifapentine regimens (with or without moxifloxacin) to the standard 6-month regimen. The study demonstrated the non-inferior efficacy of the rifapentine-moxifloxacin regimen compared to the standard regimen.

To better understand outcomes among adolescents with TB, we examined efficacy and safety data from this trial in this participant sub-group. A total of 2,516 participants were enrolled in the study. Among 63 adolescents in the primary analysis group, the proportion with unfavourable outcomes was 5%, 8%, and 11% in the control, Rifapentine-Moxifloxacin, and Rifapentine regimens.

Among 67 adolescents who started study treatment, there were no severe adverse events (SAEs) and no deaths among adolescents. 59 (87%) completed at least 75% of the intended regimen, and 43 (63%) completed at least 95%. Therefore, the four-month rifapentine-Moxifloxacin regimen can be used in the adolescent population.

Speeding up efforts to eradicate TB

STAR HEALTH REPORT

The Ministers of Health of countries in the World Health Organisation (WHO) South-East Asia Region recently committed to renew and accelerate efforts to end tuberculosis (TB), because of the pandemic disrupting services and leading to an increase in TB cases in the already high-burden region.

Despite being preventable and treatable, TB kills more than a million people every year, almost half of them in the WHO South East-Asia Region. We must intensify our effort towards ending TB. Therefore, immediate steps are needed to scale-up preventive, diagnostic and treatment services for TB, and significantly bolster social protection measures while specifically addressing undernutrition among the vulnerable populations.

The Ministers committed to multi-sectoral and whole of society approach to end TB with national programs led by the highest possible political level and closely monitored for targets. They agreed to increase budgetary and human resource allocations including upfront investments required to catch up on the lost ground during the COVID-19 pandemic. It is estimated that US$ 3 billion may be needed annually to implement a comprehensive set of interventions required to end TB in the region.

The Ministerial statement called for ensuring the highest attainable standards of rights-based, stigma-free, quality-assured and people-centric services. It emphasised that preventive, diagnostic, treatment, rehabilitative and palliative care, should be accessible to all including migrants, prisoners, children, the aged and other high-risk populations such as people with TB/HIV co-infection.

It called for social support to TB patients and their families from the time of development of symptoms, to diagnosis till the successful treatment completion and in some cases beyond treatment to address the sequelae, to achieve the goal of eliminating catastrophic financial losses.

The Ministerial statement emphasised on empowerment and engagement of community and civil society representatives in planning, monitoring, organising and providing for such support to ensure a people-centred response.

/StarHealthBD