Health care associated infections (HCAIs) are a major problem for patients and health care workers' safety. These affect hundreds of millions of people worldwide, complicate the delivery of patient care, contribute to patient's death and disability, promote resistance to antibiotics and generate additional expenditure to that already incurred by the patients' underlying disease. More than 1.4 million people worldwide are afflicted with infections acquired in hospitals. Between 5 - 10% of patients admitted to modern hospitals in developed countries acquire one or more infections, 15 - 40% of the critical care patients are affected. The risk is 2 - 20 times higher in developing than developed countries. In developing countries, more than half of all infants in neonatal units acquire a health care associated infection with the fatality rate of 4-56%. While caring for the patients, hospital workers are exposed to risks of infection like tuberculosis, needle stick injuries, HIV, etc. The better the education in infection control, the lower the risk. The burden of disease outside hospital is practically unknown due to lack of surveillance. Importantly, no health care setting, no hospital, no country in the world can claim to have solved this problem. Prevention strategies reduce infection in both developed and developing countries, most are simple and not resource demanding.

'Clean Care is Safer Care' is the slogan of the first Global Patient Safety Challenge, a core component of WHO's World Alliance for Patient Safety launched in 2004. The challenge targets the prevention of health-care-associated infections worldwide and features hand-hygiene improvement as its major focus.

Three major strategies have been recommended to minimize HCAIs. These include campaigns to generate awareness of HCAIs; commitment and leadership at the highest level, and testing and reinforcement of implementation strategies. Doctors may substitute hygiene practices, hand disinfection and universal precautions with increased prescription of antibiotics which adds to antimicrobial resistance.

Hand hygiene (HH) has long been considered as one of the most important infection control measures for preventing HCAIs. Compliance rates for healthcare workers with recommended hand hygiene procedures generally fall below 50%. Hand hygiene either by washing with soap or disinfection is the single most important preventive measure, but is often given minimal importance by hospital staff. HH compliance rates < 50% have been documented along with difficulties in improving them. Guidelines on hand hygiene in healthcare on the basis of consensus recommendations have been issued by WHO. Previous literature on ways to improve hand hygiene practices have focused on USA and Europe, whereas studies from developing countries are less common.

Promotion of appropriate hand hygiene practices is complex. Successful promotion in health-care settings requires system change, education and motivation of caregivers, leadership, administrative support, and, in some instances, empowerment of patients. Multimodal interventions have a greater chance of success than programmes focusing on a single element and have sustained effects. Cost-effectiveness and sustainability are important elements of any hand-hygiene promotion. Behavioural, educational, organizational, sociocultural, socioeconomic and sociopolitical factors are involved. The campaigns on hygiene have produced a sustained improvement in compliance with hand hygiene recommendations with the reduction of infections as shown by many studies.

An interventional study by Luby and colleagues reported the effect of hand hygiene promotion on childhood infections in a low income population in Karachi, Pakistan. After the intervention, the rate of diarrhea and pneumonia decreased by almost 50%. In 56% were less likely to consult a physician and 26% less likely to be hospitalized. Implementation of multi-faceted interventional, behavioural hand hygiene program with continuous monitoring and performance feedback, increase supplies necessary for hand washing and institutional support is important for improving the compliance of hand hygiene guidelines. Multimodal hand hygiene promotion is feasible and effective in low income countries.

The challenges are enormous, but so are the rewards: preventing illness, saving lives, improving patient safety and providing an overall better quality of care to millions of patients and families. Health care associated infections are unintended, undesirable, and intolerable.

Correspondence: Dr. Farzeen Tanwir, Assistant Professor and Head of Periodontology Department, Ziauddin University, 4/B, Shahre-e-Ghalib, Clifton, Karachi-75600. E-mail: farzeen.tanwir@zu.edu.pk

Received May 07, 2012; accepted June 20, 2012.
but many are preventable. It is time that hand-hygiene promotion should be made a priority for public health and health care policymakers, medical and nursing schools, chief medical and executive officers. Health-care workers and community members with potential should be a role model to help highlight, support, prioritize, and fund research and interventions to improve hand hygiene behaviour.

The improvement in hand hygiene are feasible, affordable, and effective in a healthcare setting with limited resources. The WHO strategy and derived tools represent an evidence-based, ready-to-use solutions for planning and supporting hand hygiene promotion in healthcare facilities worldwide, including developing countries. The adoption of the strategy on a national scale by other countries, is a major achievement to show patient safety as a visible priority and could lead to future implementation in other countries especially low middle income countries, like Pakistan.

REFERENCES