

المركز السعودي لسلامة المرضى

Hand Hygiene in Healthcare Institutions: can we increase the compliance?

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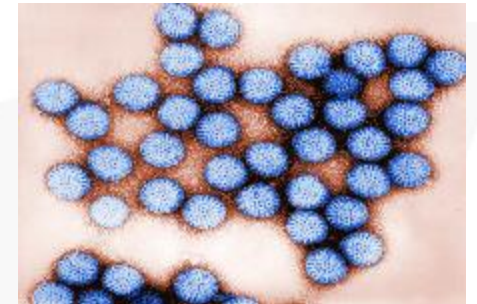
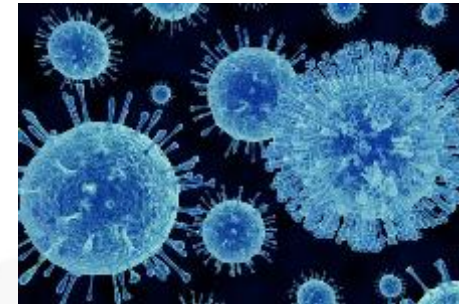
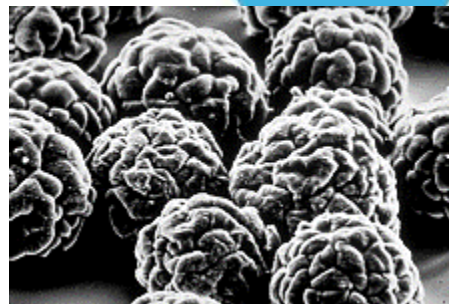
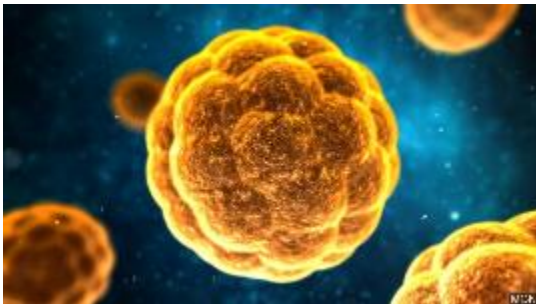
Overview

- Hand hygiene (HH) is one of the most cost-effective methods that will help in decreasing the infection spread in our healthcare institutions.
- Lack of compliance of HH is a global problem, not linked to a country in particular but to all especially to the low-income countries.
- Hand washing with soap and water is more effective in reducing hand contamination, with bacterial or viral loads, after cleaning and drying hands than before hand washing.



Overview

- Hand washing is significantly more effective at removing bacterial spores from the hands than are hand sanitizers.
- Residual spores are readily transferred by hands if soap and water was not used.
- Non-enveloped viruses can be resistant to hand sanitizers i.e. alcohol (rotavirus, norovirus, polio, Hepatitis A).

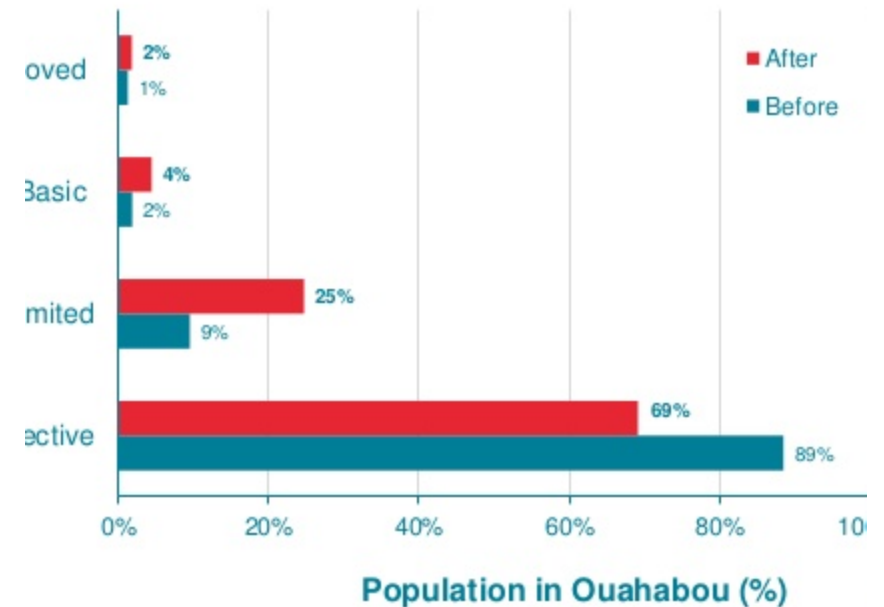


Cost

- Educational Studies towards hand washing might appear expensive, but it's less expensive than cost of infection treatment.
- A study from India found that annual net cost of diarrhea was \$23 billion per year.
- The same study claimed that the cost of a national hand washing program would be \$62 million per year.



washing with soap



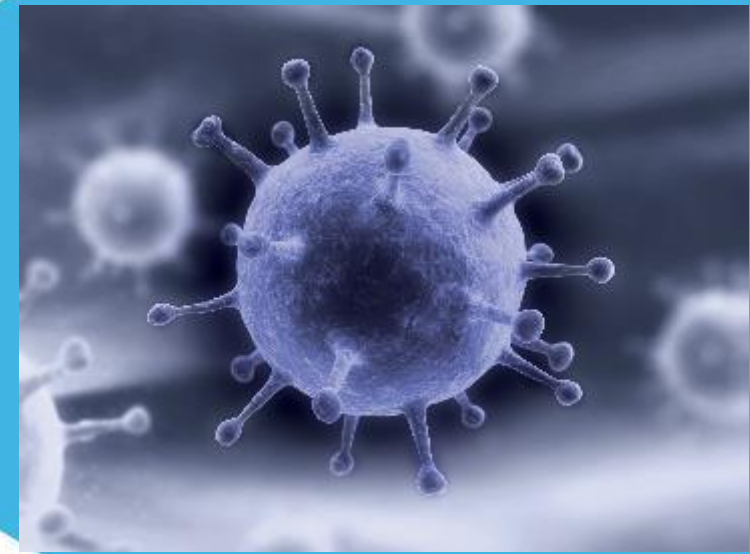
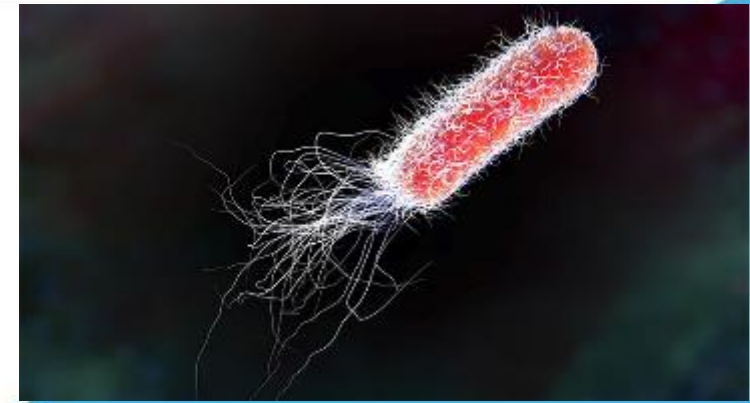
Sources of hand contamination

- Healthcare workers can get around 100 to 1000 of bacteria on their hands by doing simple tasks, such as:
 - pulling patients up in bed
 - taking a blood pressure or pulse
 - touching a patient's hand
 - rolling patients over in bed
 - touching the patient's gown or bed sheets
 - touching equipment like bedside rails, over-bed tables, IV pumps



Infection Transmission

- Improved hand hygiene compliance among hospital staff was associated with lower Healthcare associated infection prevalence.
- E. coli transmission on hands was significantly lowered after cleaning using soap, and water.
- Hand washing habits were associated with lower rates of seasonal influenza transmission.
- Hookworm transmission decreased significantly with better quality of sanitation and good hand hygiene.



Hand hygiene Compliance

- Overall compliance among nurses was highest after body fluid exposure risk (93%) and lowest before touching a patient (18.5%).
- Hand hygiene compliance was significantly associated with gloves wearing/removal, where 14.8% washed their hands before putting on gloves and 56.6% after removal.
- Around 85.5% of medical students had knowledge about hand hygiene, but only 33.87% were aware of the minimal time needed.



Factors Affect Compliance (1)

- The non-believe that Hand hygiene is essential whether someone is busy or tired, and being concerned with good manners.
- Absence of soap and water at stations.
- Hard access to the necessary materials, including a functional hand washing station with soap in a convenient location.
- Empty hand sanitizer containers.
- Lack of proper signs on the site to remind people to wash / decontaminate their hands.



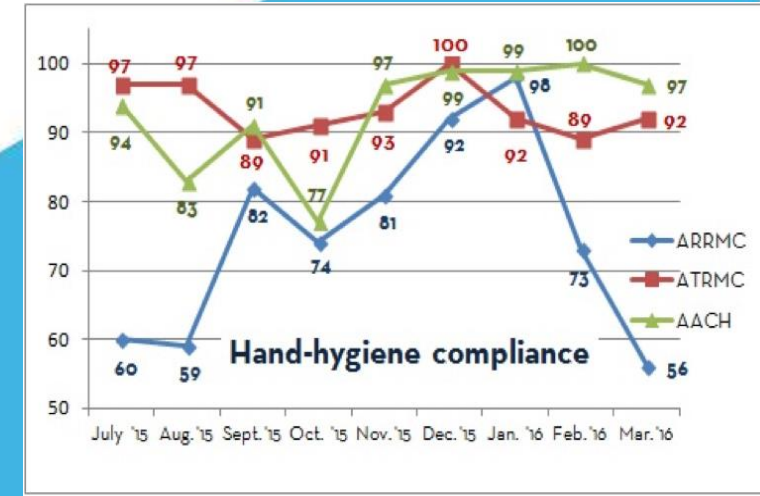
Factors Affect Compliance (2)

- At two hospitals in a study done in Uganda, hand washing did not happen at 80% of all hand washing opportunities, except when staff knew that they are dealing with infectious patients.
- Poor training of healthcare workers as a result of being coming from low resources countries or had inadequate training in their educational institutions.
- Overcrowding in a ward or high workload that's make hospital staff too busy to think about hand Hygiene.



Compliance Increase (1)

- Education and awareness using research studies and the language of numbers.
- Provide all necessary materials for hand washing (water, soap, tissue papers, rubbish bins and step by step posters).
- Provide good quality hand sanitizers that can be friendly on the staff hands and make sure its distributed on the right locations.
- Follow up to measure any compliance improvement within the hospital staff.



Compliance Increase (2)

- Appreciate the staff who really comply with the request of hand hygiene and **not** punish who does not comply.
- Reward the best: ward, staff nurse, physicians, technicians who really comply with hand hygiene within the hospital.
- Use the social media to announce about the heroes of hand hygiene in your hospital.



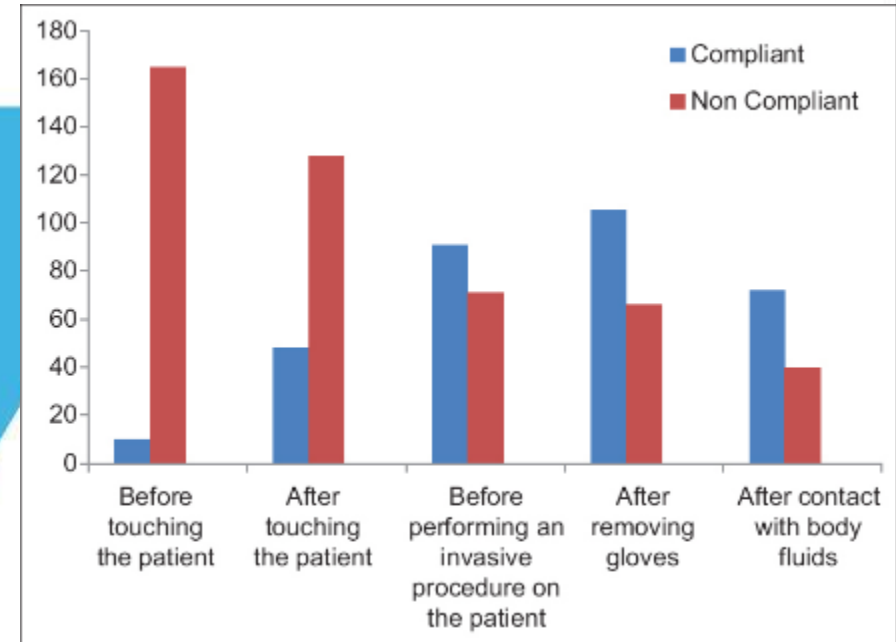
Compliance Increase (3)

- Encourage the hand hygiene champions meetings with other units/departments to share lessons learned among units:
 - ✓ the stories of success
 - ✓ the good hand hygiene practices
 - ✓ the proper incentives
 - ✓ review action plans developed and future work



Compliance Increase (4)

- Distribute the information through different routes (local conference, data sharing through meetings and as reports).
- Print the best units compliance overtime and how the number 1 unit compares to other units in your service.
- Discuss data regularly in staff meetings, exploring barriers to compliance and reiterate indications for good hand hygiene.



Conclusion

- Although hand hygiene is crucial in infection transmission, compliance is still poor, these tips however might help.
- Infection control staff have a huge responsibility to monitor that regularly.
- Monitoring need a lot of effort and collaboration within the hospital staff and continues feedback is required to reach the target.
- Strategies and focused plans are what will help allot in a better compliance.

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