Hand Hygiene Nigeria: Implementation Lessons

By: Dr. Sylvia Kama-Kieghe
Edited by: Andrew Duong
Reviewed by: Dr. Uyen Nguyen

Date : November 13, 2015

Abstract:

Infection prevention and control in health care settings in Nigeria is still very poor. Improvement in hand hygiene is fundamental to patient safety and could reduce the burden of diseases and deaths associated with preventable infections especially in mothers and children in Nigeria. It could also protect the well-being of health care providers and the general population. Investment in hand hygiene improvement has health, development and economic benefits. While not given as much attention as it deserves by policy makers, the implementation of a hand hygiene partner programme pilot which was well received exposed the benefits of hand hygiene to patients, health care providers, and the general population. Improvement in hand hygiene has to be one of the pillars to improve quality and outcomes in health care facilities in Nigeria.

Main Article:

Introduction

The 2014 Ebola outbreak in Nigeria renewed advocacy for the strengthening of infection prevention and control systems. Weak infection prevention and control systems result in increasing rate of infection transmission in health care facilities and in the general population. This can have serious implications on patient safety, quality of care, and the entire health care system.

Antimicrobial resistance (AMR) is a growing and significant threat to health care[1]. With AMR stewardship still weak and no new major antimicrobial discoveries for some time now, infection prevention and control remains our fall-back to winning the asymmetrical war against disease causing microorganisms. This is a real, credible, and present threat.

The good news is that there is available knowledge for infection prevention and control. The bad news is that a combination of wrong priorities in integrated policy options and resources is constraining the capacity and capability for infection prevention and control. Health care providers, patients, and the general population are trapped in between. In particular, health care providers can play very significant roles to promote and advocate for the strengthening of infection prevention and control systems. This is because it is in their self-interest to protect their occupational health and safety from health care associated infections (HCAI) and from potential epidemics such as Ebola that may challenge our surveillance and response architecture.

Health care providers owe their patients a duty of care to protect them from harm. HCAI-related adverse events occur due to weak infection prevention and control measures in health care facilities[7]. This may affect patient outcomes and may have significant costs, medico-legal and return on health care investment implications. Therefore, health care

providers should be at the forefront of aligning evidence to policies, to resources, and to effective and efficient implementation of infection prevention and control practices at health care facilities. To galvanise action and build support based on the facts can sometimes be challenging especially in developing countries. However, the case for infection prevention and control is strong and can easily be built on its potential multiplier benefits to health, development, and the economy. For example, improvement in infection prevention and control practices in Nigeria can reduce preventable maternal, new-born, neonatal, and childhood infections and the associated high morbidity and mortality–a major health and development challenge with significant drag on development and economic performance[6].

Fundamental to infection prevention and control is hand hygiene improvement. Most infections are spread through hand contact. This is why the World Health Organization (WHO) has been promoting WHO SAVE LIVES: Clean Your Hands global campaign annually on May 5th. WHO chose **"strengthening healthcare systems and delivery – hand hygiene is your entrance door"[3],** as the theme for this year, which could not have been more appropriate.

Background

In 2011, a team of Nigerian healthcare professionals with experience in Nigeria and in the United Kingdom decided to scope for opportunities to contribute to the improvement of health care in Nigeria. We found serious weaknesses and gaps in infection control and prevention practices. This was of significant impact to patient safety, occupational health, and disease epidemic risk concerns. Challenges in Nigeria and compelling case for hand hygiene improvement were our focus. Subsequent planning and strategic engagement for implementation of hand hygiene improvement programmes led to cross-border collaboration among Solu-Care Aide Nigeria, SKD Productivity Center, UK, and GOJO Industries Inc. USA. This collaboration led to strategic partnership with the Federal Ministry of Health, Nigeria in 2012 to promote patient safety and hand hygiene. SKD Productivity Center provided technical support in the design and planning of the hand hygiene programmes adapting **WHO multimodal hand hygiene improvement strategy[2]**. GOJO Industries Inc. provided material support. Solu-Care Aide managed the hand hygiene partner programme within the Nigerian context in partnership with the Federal Ministry of Health (FMoH) and selected participating tertiary hospitals. We share below our experience on this intervention which ran from 2012-2013.

Methods (of the intervention)

- *Strategic engagement*

To ensure ownership, leadership, and commitment, we entered into a memorandum of understanding (MOU) with the FMoH, Nigeria. This followed several deliberation meetings with focal persons and stakeholders at the FMoH and approval by the Minister of Health (MoH).

- *One day national hand hygiene event*

The objective of this event was to initiate nationwide hand hygiene discussion and facility-level hand hygiene improvement following a structured diagnostic and a systematic approach.

The theme of the event was **"Promoting Hand Hygiene – Protecting National Health and Improving Productivity."**[6]

The event attracted key stakeholders at the state and federal levels in health, development, and education including non-governmental organizations in health, international development partners, and the organized private sector to integrate hand hygiene as part of their business principles and corporate social investments.

- *Hand Hygiene Partner Programme (HHPP)*

HHPP was adapted (by a team comprising SKD Productivity Centre, Solu-Care Aide and FMoH) from the **WHO**

multimodal hand hygiene improvement strategy[2] considering System Change alongside Education and Training, Reminders in Workplace, Evaluation and Feedback, and Institutional Safety Climate.

Eight tertiary hospitals were selected by the FMoH to pilot the implementation of HHPP in their maternal and child units for a period of 3-6 months. Elements of HHPP were modified to suit each of the hospitals with the input of members on their infection prevention and control team.

The overall objective of HHPP was to initiate structured nationwide and health care facility-level hand hygiene diagnosis and to initiate a systematic approach to hand hygiene improvement within the Nigerian context. The hope was to ingrain hand hygiene compliance in healthcare settings among healthcare workers, promote hand hygiene champions, and to create hand hygiene awareness in the communities and general population nationally to reduce the high rate of infections accounting for most clinical consultations, common health complications, and the high risk of infectious disease epidemics.

HHPP implementation followed:

- Hand hygiene training and education: this was for members of infection prevention and control from selected participating tertiary hospitals and staff of the FMoH, and led by Dr. Joyce D. Hightower, the regional manager of African Partnerships for Patient Safety (APPS)[4]. WHO videos and PowerPoint slides were used at initial and subsequent training presentations by Solu-Care Aide Program Officers.

- Patient Safety Situation Analysis[5] and Hand Hygiene Self-Assessment Framework[8]: this was completed to establish some baselines for general patient safety and hand hygiene practice and promotion in the selected hospitals.

- The supply and installation of materials: free alcohol based hand rubs (dispensers, refills, desktop, and personal bottles) donated by GOJO Industries, WHO hand hygiene posters and visual cues, WHO hand hygiene manuals and tools, etc. Programmers from Solu-Care Aide visited and installed dispensers and posters at the correct locations following WHO guidelines.

- Hand hygiene policies and procedures: we entered into agreements with individual participating hospitals, and assisted them in design and development of policies and procedure to support hand hygiene promotion and practice.

- Monitoring and feedback: members of our programming team visited each of the participating hospitals on at least 3 occasions for monitoring and feedback to the management of the hospital and engaged with the infection prevention and control team to sample opinion and feedback health care workers in the hospital generally and particularly in the maternal and child units. Regular feedback was also provided to the FMoH.

- Sustainability: members of the programming team carried out advocacy visits to the management of the hospitals on each visit to emphasize post pilot program sustainability.

- Materials

- WHO hand hygiene improvement tools (surveys, questionnaires, posters/visual cues, videos, PowerPoint presentations, etc.) were used.
- Purell alcohol based hand rub were distributed for free.
- GOJO / PURELL manual and touch free dispensing systems were installed .

Summary of Observations, Findings & Opportunities

- All the participating hospitals had infection prevention and control committees, but none had a patient safety team.
- There were inadequate water infrastructure facilities in all the participating hospitals and there were no alcohol based hand rubs available or in use when we started the HHPP.
- Hand hygiene was generally poor at the participating hospitals and there were no systems in place for improvement.
- The concept of hand hygiene at the **"point of care"** (My 5 Moments)[9] was new to health care providers at the participating hospitals.
- There was a very high level of enthusiasm and desire among all the health care providers to practice hand hygiene at the "**point of care"** if they had access to alcohol based hand rub within the "patient's zone/care environment."
- There was very high level of enthusiasm among health care providers to improve hand washing.
- Some of the hospitals expressed interest in conducting further studies on Hand Hygiene compliance, HCAI, and in training their staff.

Outcomes, Conclusions, and Significance

- We were able to work with the FMoH and the management of participating hospitals to successfully implement HHPP.
- There was general co-operation among health care providers to change behaviour towards hand hygiene practice and promotion.
- Successful implementation of HHPP demonstrated that we can achieve significant improvement in hand hygiene compliance at the **"point of care"** observing **"my 5 moments"**[9] if the right systems and supports are put in place in all health care facilities in Nigeria.

Further work and recommendation

- More scientific work in this area is required to generate local data to support policy.
- There is a need to work closely with government and private hospitals to improve hand hygiene promotion and practice from generally low levels to Intermediate and advanced level over time to promote hand hygiene friendly health care facilities.
- There is need to incorporate and emphasize hand hygiene in the training of all health care providers including doctors, nurses, midwives as well as community health workers, village health workers, traditional birth attendants, and other human resources for health providing care in under-served areas.
- There egular training & workshops are required in hand hygiene and patient safety in different parts of Nigeria for health care providers.

Images:

Figure 1-Promoting Hand Hygiene: Protecting National Health and Improving Productivity

Figure 2-Key Opinion Leaders at Hand Hygiene Conference, Abuja -June 2012

Figure 3- A Training Session in Hand Hygiene Programming HHPP, 2012

Figure 4-Healthcare worker using ABHR

Figure 5 - HCW trained in hand hygiene practice via HHPP

Figure 6-Chief Medical Director of one of the pilot hospitals with SCA Programmers, FMC Keffi 2012

Figure 7-Placement of ABHR with reminders for HCW and patients

Figure 8 - HCW enthusiastic about the use of ABHR at the 'point of care'

Figure 9-Nursing staff at training in Hand Hygiene practice FETHA, Ebonyi state, Nigeria.

Figure 10-Training for HCW, FETHA

Figure 11 - Practical Demonstration of Hand rubbing at a training session by SCA Programmer

Figure 12- HCW, using ABHR positioned at 'point of care' FMCY Bayelsa

Read More:

Liberia: Dangerous Soap Slurry to Clever Drying Hooks
http://infectioncontrol.tips/2015/12/01/liberia-soap/

Patient Hand Hygiene: The missing link in preventing Hospital Acquired Infections?
http://infectioncontrol.tips/2015/12/09/patient-hand-hygiene-the-missing-link-in-preventing-hospital-acquired-infections/

Building a Career In Infection Prevention: Jomcy's Story
http://infectioncontrol.tips/2015/11/13/building-a-career-in-infection-prevention-jomcys-story/

References:

1. Antimicrobial resistance- WHO Fact sheet N°194 (Updated April 2015)
2. A Guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy : http://www.who.int/gpsc/5may/Guide_to_Implementation.pdf Accessed 01/11/2015
3. http://www.who.int/gpsc/5may/en/ WHO website accessed 27/10/15
4. http://www.who.int/patientsafety/implementation/apps/en/ WHO website accessed 27/10/15
5. Patient Safety Situation Analysis Short Form, APPS, April 2012: http://www.who.int/patientsafety/implementation/apps/resources/APPS_Improv_PS_Situational_Analysis_SF_2012_04_EN.pdf?ua=1 Accessed 01/11/2015
6. Promoting Hand Hygiene – Protecting National Health and Improving Productivity. (Report on June 2012 Hand Hygiene event Abuja, Nigeria organized by FMOH Nigeria, Solu-Care Aide Nigeria and SKD Productivity Center. http://www.solucareaide.org/pdfs/SPECIAL_REPORT_ON_NATIONAL_HAND_HYGIENE_EVENT_-_28.pdf Accessed 01/11/2015
7. Report on the Burden of Endemic Health Care - Associated Infection Worldwide, Clean Care is Safer Care -

WHO Publication 2011.
8. WHO Hand Hygiene Self-Assessment Framework tool: http://www.who.int/gpsc/country_work/hhsa_framework_October_2010.pdf?ua=1 Accessed 01/11/2015
9. WHO My 5 Moments for Hand Hygiene: http://www.who.int/gpsc/5may/background/5moments/en/ WHO website Accessed 27/10/15