

Lacor & Kalongo Hospital
infection survey
Children's Ward -February 2020

Introduction

Nosocomial infections also known as hospital acquired infections (HAI) are those which manifest within 48—72 hours of hospitalization. It is acquired through health care provision, health care seeking or visiting a health care facility. Such infections should not have been present or incubating at the time of visiting a health unit. Nosocomial infections increases morbidity, mortality and decreases quality of life. It further increases the cost of patient care, both direct and indirect, through the need for additional and expensive drugs, laboratory and other diagnostic test and the extra expenditure due prolonged hospitalization.

The most frequent type of infection hospital wide is urinary tract infection (36%), followed by surgical site infection (20%), and bloodstream infection and pneumonia (both 11%). In developed countries clean surgeries have an infection rate 1- 4 %. In Africa, Hospital-wide HAI prevalence varies between 2.5% and 14.8% in Algeria, Burkina Faso, Senegal and the United Republic of Tanzania.

Overall HAI cumulative incidence in surgical wards range from 5.7% to 45.8% in studies conducted in Ethiopia and Nigeria. Studies in Uganda found 14 % infection rate in clean surgery in Mulago Hospital in 1990. Lacor hospital which treats 570 outpatients and 544 inpatients daily, provide a conducive environment for HAI unless it strictly adheres to Standard precautions.

Greco in a 2010 found the prevalence of hospital acquired infections (HAI) at the Lacor to be 28%, and a repeat survey 1 year later (Greco, 2011) found a 50% reduction in the HAI rate of 14%.

Objective: Determine the prevalence of hospital acquired infections in Lacor and Kalongo H children's ward in 2020 to compare with historical values.

Study design

- A point prevalence **one day** survey repeated in 3 admitted children cohorts separated by 15 days each: in this way the first survey on the occupied 100-120 beds will be repeated after 15 days and then after another 15 days considering the mean hospital stay around 5 days.
- The survey team include the head pediatrician, the Public Health officer, medical officers and nurses.
- Data will be collected in a standard form (att.1).
- On the survey day all clinical charts of patient present in the ward that day (In patients) **and admitted not less than two days before survey**, will be revised by the ward medical and nursing personnel, best during the daily clinical bed side visit.
- Children admitted to hospital within the 48 hours before the survey will be excluded (in fact the probability that they develop an HAI in few hours after admission is very low)
- On each clinical chart signs and data of infection, according to protocol definition will be searched. Data are reported on the attached form, one line for each case. Case suspected of and HAI should be scrutinized and the appropriate form fully recorded (N.1)
- In case of a doubtful result from the chart screening the ward personnel will visit or interview the patient after having collected informed consent as for the attached form (att. 2). Es: in case of doubts for an acquired infection, the ward personnel will inspect the patient looking for signs of infection and possibly get supportive information (ex. XRay for suspected Pneumonia).

- The clinical signs and laboratory data relating to HAI will be collected in a standardized anonymous questionnaire: the presence of HAI will be diagnosed according to WHO standard criteria and definitions.
- Data generated will be checked for relevance and completeness on the day of the survey and will be entered and analyzed using Excel software and results presented in table and charts.
- Data forms are anonymous and data analysis will be performed in the children's ward. In no case individual data will be discovered.
- Findings will be disseminated to the hospital management, CME forum and all the wards for critical reflection and thus behavioral change

FORM N. 1 Questionnaire on Lacor and Kalongo Hospital infection survey March 2020

To be filled for patients admitted at least 2 days before with suspect HAI

Patient N _____ admission d/m _____ Age (m) ____ Sex _____

Diagnosis at survey time (best estimate)

The patient in the last week had: (Y or N)

vascular cannula? ____ for days? ____ Urinary catheter ? ____ for days ? ____

(all patient with Urethral catheter **must** have a urine sample sent to lab **to day !!!**)

Antibiotic therapy? ____ none/one antibio/multiple

Does the patient have to day a suspected Hospital Acquired Infection? (Y/N) _____

If Yes infection of: (Y/N) Urinary tract ? ____ Respiratory tract? ____

Bloodstream ? ____ Diarrhoea ____ Unexpected fever ____

Instructions : Hospital acquired infection is an infection in the patient that was not present at patient admission.

Assign the value 9 for N.A: Not Appropriate – Not Available - Unknown

Each child with suspected HAI at the time of screening should be evaluated to confirm or not the presence of an Hospital Acquired Infection , by :

1. Patients with urinary catheter: check patient for local pain or burning, fever or urinary lab test positive for infection (count of white cells, nitrite pos etc).

Remember to send urine sample to lab.

2. Respiratory infection: take positive a respiratory infection with Xray or Doctor's evidence of a lower respiratory infection not present at patient admission.

3. Bloodstream infections: take phlebitis on site of insertion of cannulas or patient with a lab or clinically evident septicemia not attributable to their disease.

Diarrhoea : 3 or more loose stools in the last 24 hours not present on admission.

Fever: not present in the first two days of admission, unexpected

Comments_____

Appendix 2:

Informed consent form :

Lacor and Kalongo hospital are performing a one day investigation for all children admitted to wards till the 2 days prior: clinical charts will be reviewed by an hospital team to look for infections acquired during hospital stay. The team will work in cooperation with the ward clinical personnel.

In case of incomplete information on the clinical chart the ward clinical personnel will ask you some more information about your actual state of health.

In case the child have been experienced an urinary catheterization during this admission you will be requested to provide his urine sample for urinalysis to be done in the hospital Lab. No other biological sample will be taken.

So there is a possibility that during the morning of the survey you will be requested to provide some information on your child's health by the Doctor or the nurse in charge in the ward this day. Those information will be treated completely anonymously and no risk or no extra charge will be on you.

The survey is done to improve the quality of hospital care to the benefit of the patients: in fact already the hospital did perform two of this surveys in 2010 and 2011 and adopted new measures that substantially reduced the hospital incidence of acquired infections.

Therefore we will be pleased to receive your consent to be interviewed or visited by the ward personnel in case you will be selected for this action.

The investigation will in no case affect the treatment you are receiving and if you do not feel available for this small interview no modification will be done to your stage in the hospital. In case you have complaints about violation of your rights as a participant, you can contact the chairman Lacor hospital Institutional Research Committee at 0772593901 and Kalongo Director respectively.

Thank you for your cooperation:

Yes I agree with this interview or visit or urine sample taken _____

No I disagree on any interview or visit or urine sample taken _____

Participant's Signature _____ Date _____ Witnessed by _____