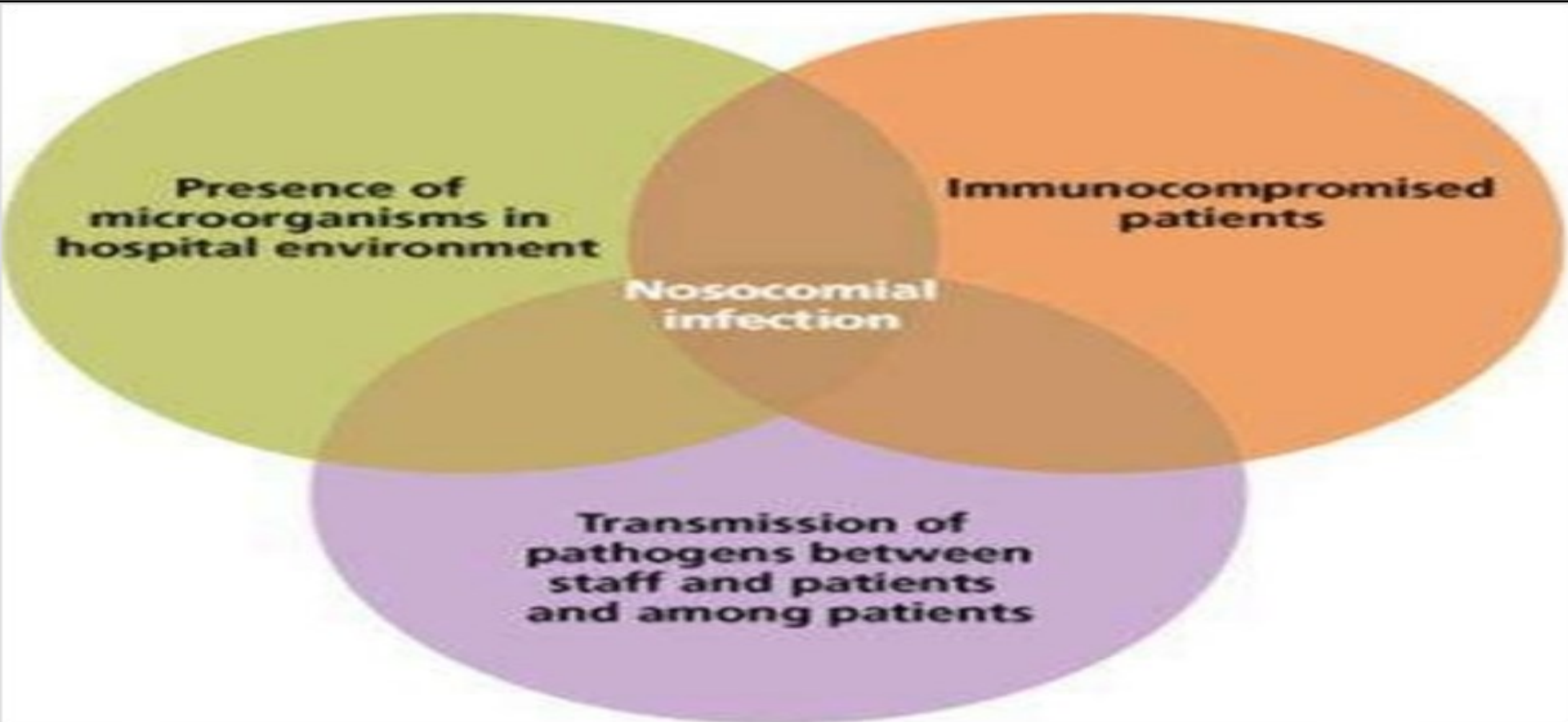


Nosocomial infection rate among surgical patients of Shekhar Hospital

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Background and Rationale:-

The nosocomial infection/hospital acquired infection is one that any new infection, first appears up to 48 hours after hospital admission and up to 3 days after discharge. In a healthcare facility when someone was admitted for reasons other than the infection. Nosocomial infection is one of the major causes of mortality and of increase morbidity period for patient Hospital-acquired infections result in up to 4.5 billion dollar in additional healthcare expenses annually.



Research Question:-

How many percent of post operative patients got hospital acquired infection?

Objective:-

To assess the magnitude of HAI after surgical procedure and hospitals precautionary measures against HAI.

Methodology:-

Quantitative study

Based on Primary data

Longitudinal study of 1 month duration(15 April 2017 to 15 may 2017)

Cluster and convenience sampling

Prospective study design

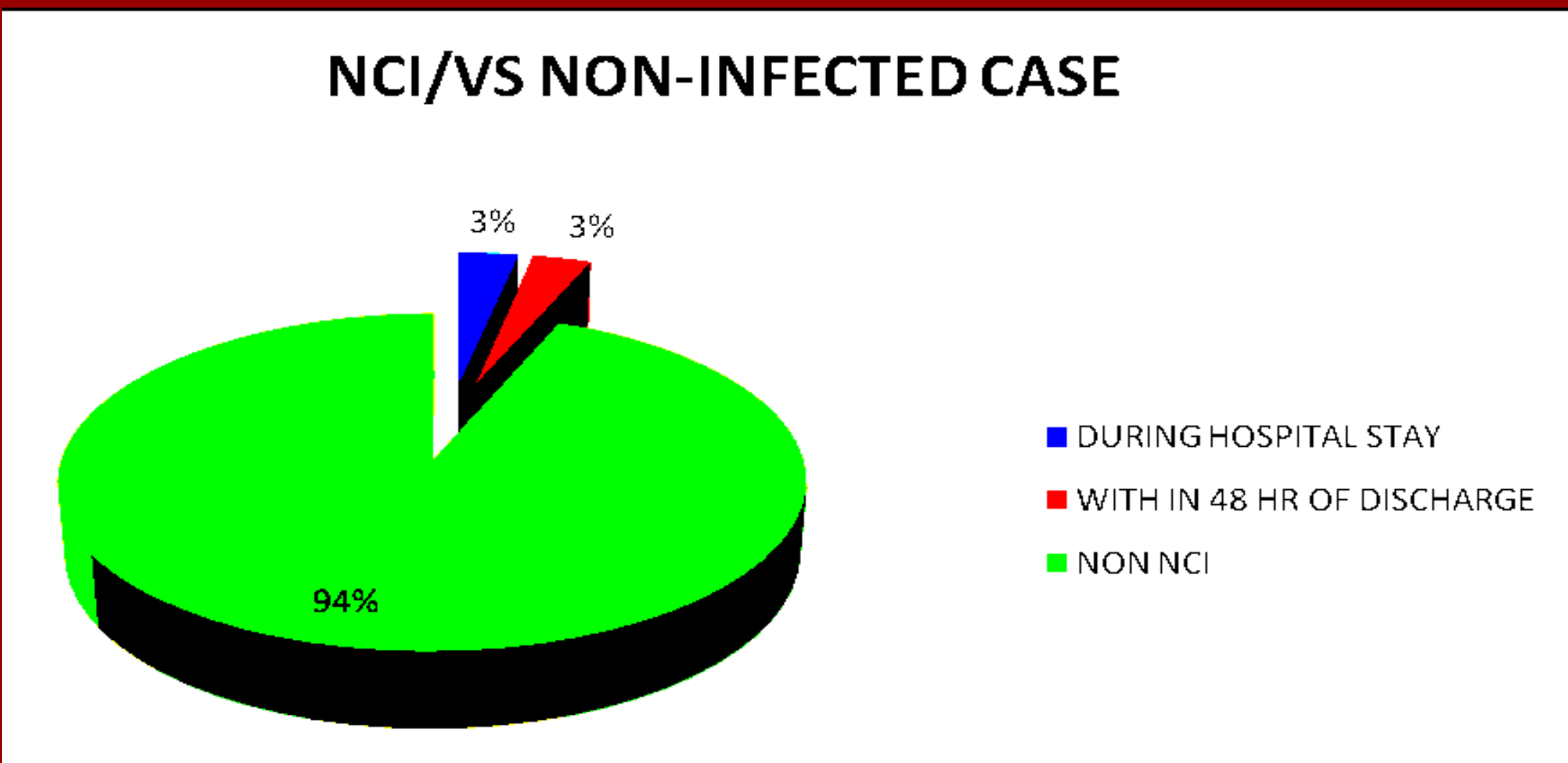
Number of surgeries= N=80

$$s = \frac{X^2 NP(1 - P)}{d^2 (N - 1) + X^2 P(1 - P)} \quad \text{so} \quad s = 66$$

Tool:-

PATIENT NAME	OPD NO.	IPD NO.	TYPE OF SURGICAL PROCEDURE	DATE AND TIME OF ADMISSION	DURING HOSPITAL STAY GOT NEW INFECTION	DATE AND TIME OF DISCHARGE	TILL 48 HR. OF DISCHARGE ANY NEW INFECTION IS REPORTED	Approx RECOVER Y DELAY DUE TO NCI (as per the doctor)

Results:-



The figure 1:- shows % of NCI among all kind of surgeries

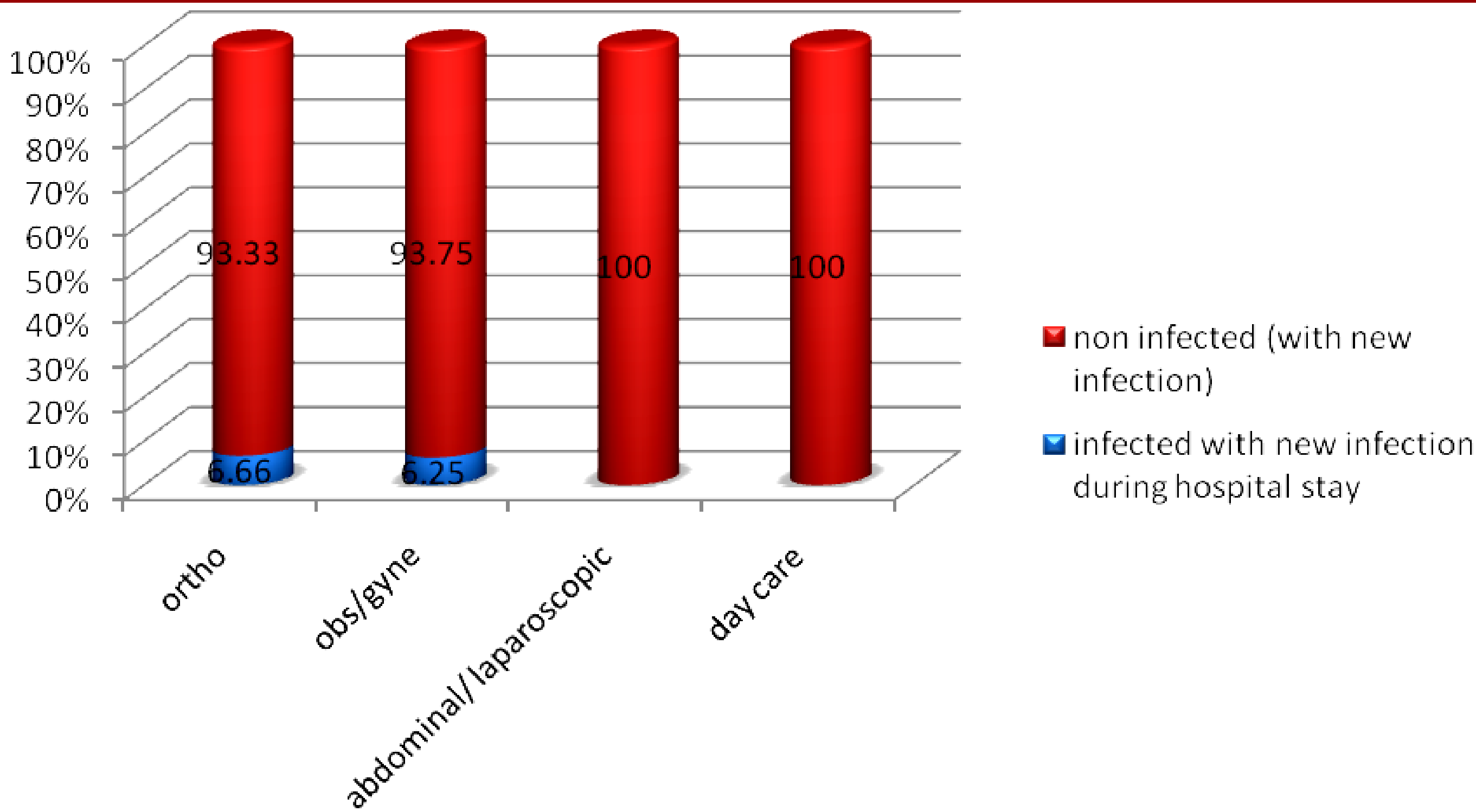


Figure 2:- During hospital stay got new infection graph

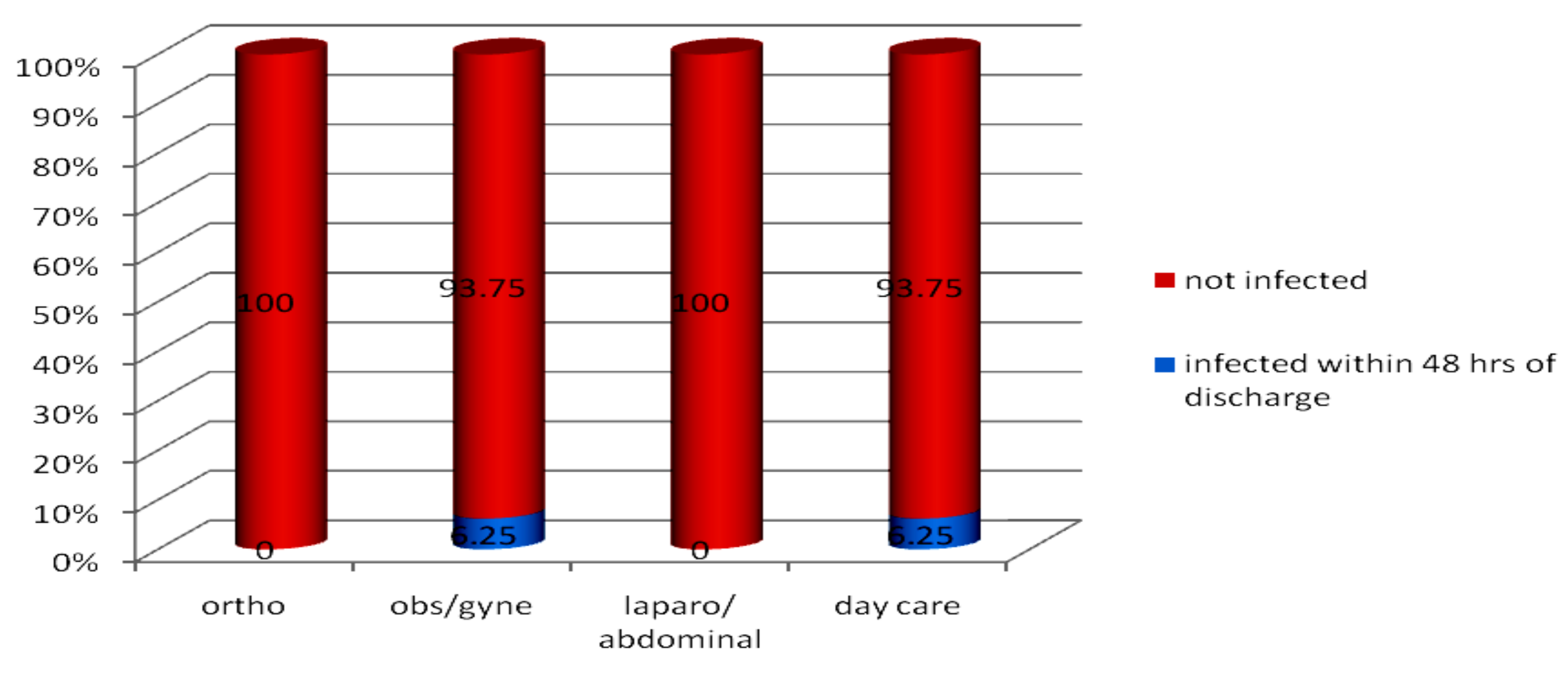


Figure 3:- with In 48 hr of discharge , got infection

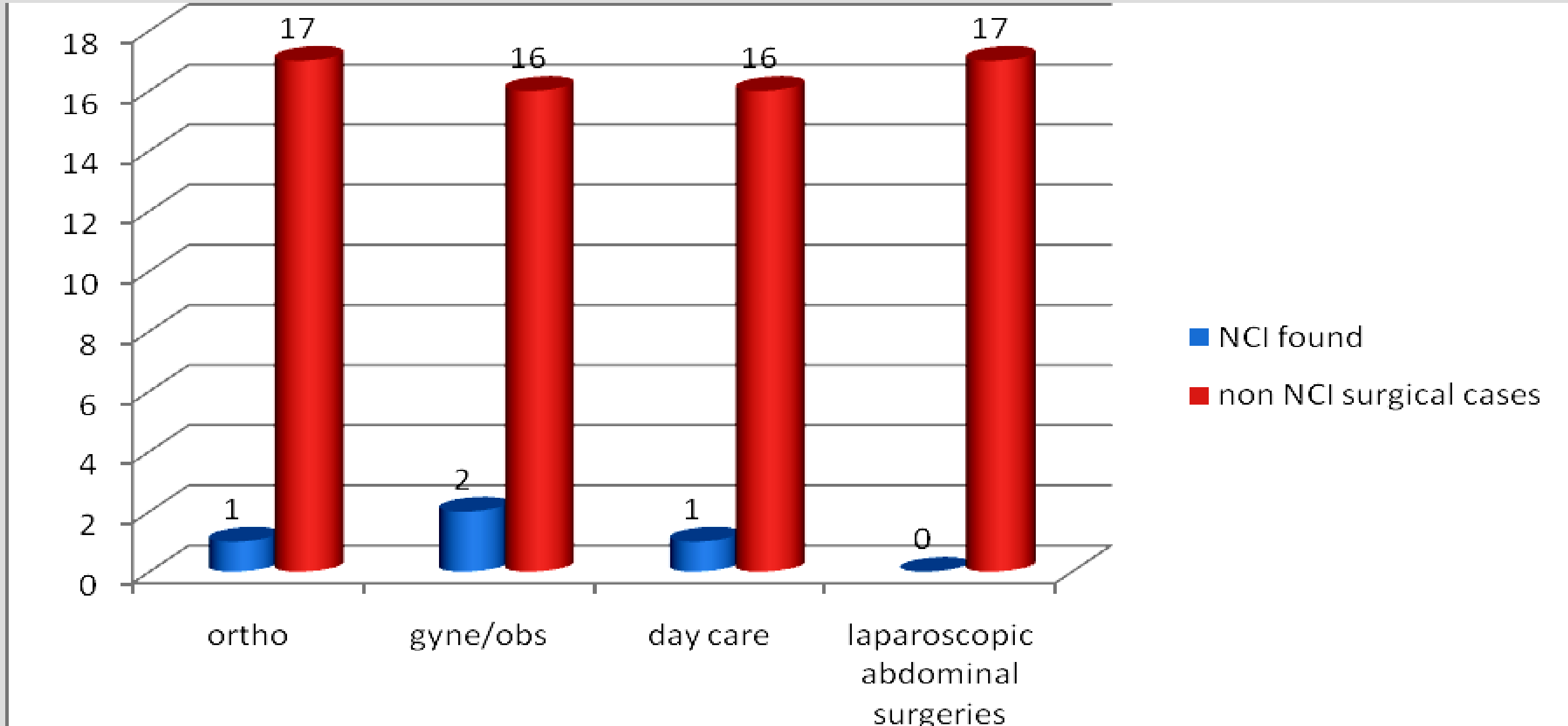


Figure no 4:- NCI among different type of surgeries

Conclusion:-

As per NCBI data – 5year analysis on surgical site infection(2010-2015)\ Nosocomia infection rate among different procedure are
Orthopedic surgeries: - 8.0%of all orthopedic surgeries
Abdominal surgeries: - 14.0%
Day care surgeries:-8.4%
Obs/ gyne:- 22%- 19% respectively ; collectively 20.5%
So over all % among all surgeries is 12.72%

As per our collected data of shekhar hospital

Orthopedic surgeries: - 5.8%
Abdominal surgeries: - 5.8%
Day care surgeries:-6.25%
Obs/ gyne:- 12.5% ; collectively
So over all % among all surgeries is 7.58%

Recommendation:-

_There should be separate medication preparation area and education or training for ICU staff about prevention of nosocomial infections.

-Identify the need and type of isolation

-Use 2% chlorhexidine wash for patient's sponging

Follow the guideline provided in 'Prevention of hospital-acquired infections by World Health Organization'

References:-

-Health care-associated infections FACT SHEET - World Health organization.2016 health statistics vol (1)2
-NCBI data 2010 to 2015 report

