Study on reporting of preparedness of hospital staff in emergency conditions

Presented By:

Dr. Komal Pandit
18-1453

Guided By:

Col. Dr. Ashok Kaushik
Dean, Academics and Student Affair
IIHMR, Jaipur

About the Organization

Apollo BSR is a multi-specialty hospital with a motto to provide quality healthcare at affordable cost. It has a fully equipped tertiary care centre of international standard for cardiac intervention and surgeries.

Apollo BSR is 175 bedded super specialty hospital providing secondary and tertiary level healthcare at affordable cost in association with Apollo hospitals Chennai

Hospital is recognized and empanelled by Govt. of Chhattisgarh, CSEB, NSPCL, FCI, BSNL, CISF, NMDC, SECL, various insurance companies and TPAs.

RATIONALE:-

Improving the reaction time and handling time of various emergency situations like fire, child abduction, medical emergencies, chemical spillage, natural calamities, security treats, also improving the handling capacity and streamlining the disaster management.

This will also help in saving various lives in the hospital (staff, patient,vitors,relatives,employees) and also increases the security and safety for all and leads to increase employee and patient satisfaction.

Common codes will help in quick reactions and easy management. It will also help in coordination with other nearby hospital and services like police, fire brigade, etc at the time of uncontrollable emergencies.

RESEARCH QUESTION

Access the knowledge among the staff and reduce the delay for handling of emergencies.

Can we improve the awareness and knowledge among staff with the help of continuous training?

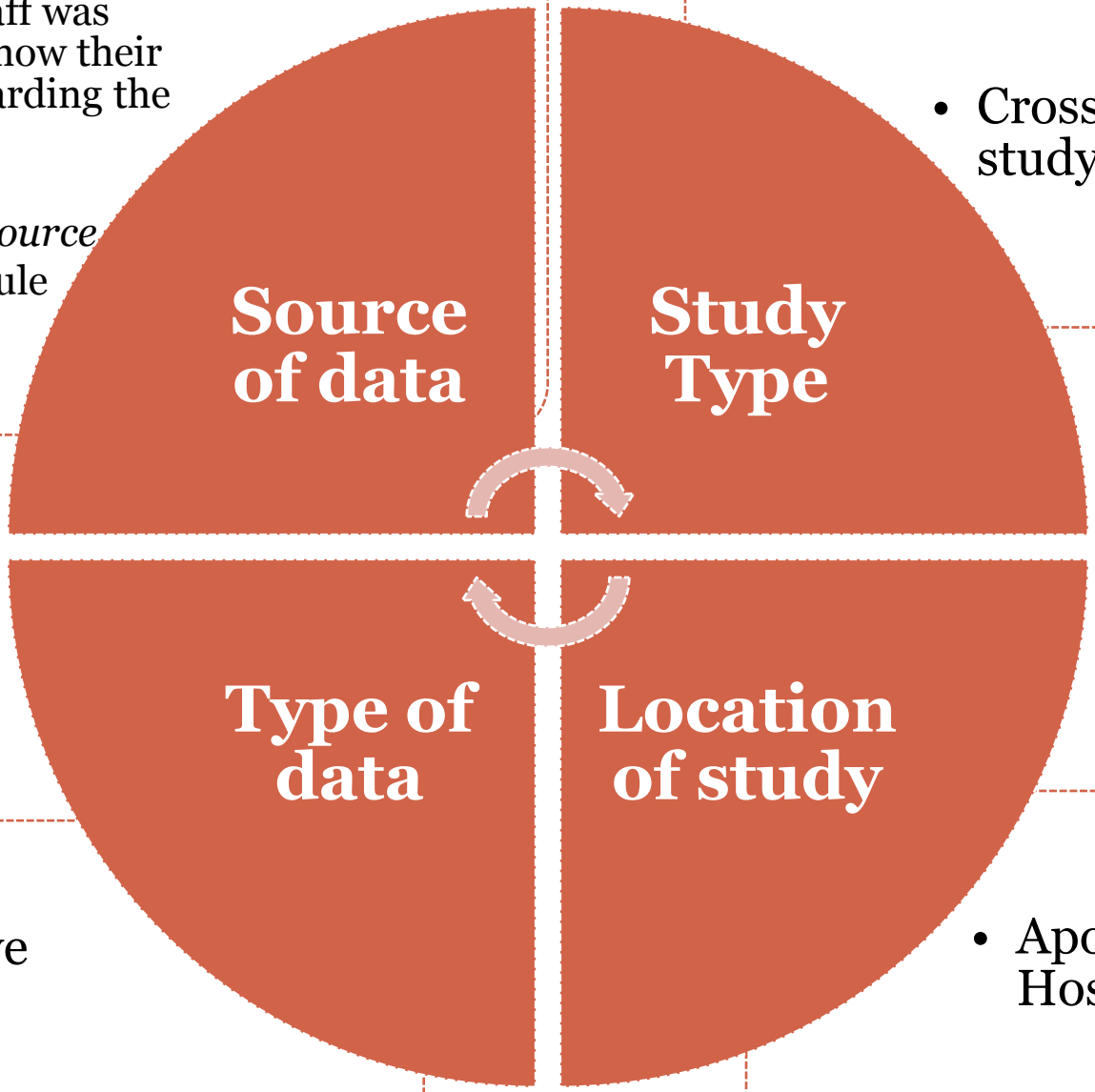
OBJECTIVES

•To identify various emergency codes available in the hospital.
•To measure and assess the awareness among the staff (clinical and non-clinical) about different codes and protocols to be followed.
•To evaluate the knowledge of the staff regarding emergency protocols after proper training of the staff.
•To improve the reaction time by performing the mockdrills(wherever possible.)

METHODOLOGY

- *) Primary source*
- Interview of staff was conducted to know their knowledge regarding the emergencies.

- *b) Secondary source*
- Training schedule



- Cross sectional study

- Quantitative

- Apollo BSR Hospital, Bhilai

Study Area

- Out Patient Department, in- patient department, supportive areas.

Sampling method

- Purposive Sample was selected on the basis of duty roaster as study demanded pre assessment of knowledge, training and post evaluation of training (long duration). A detailed questionnaire was prepared and test was conducted under the HR and quality supervision. And training was done as class room training and staff was provided with written

Sample size

- 60 hospital staff were interviewed and trained.

Study Technique –

- Observation, interview, questionnaire

Data collection Tool –

Primary data collection: 1.Informal interviews with staff of the hospital
2. Post training interviews and test.
3. Direct observation (via mock drill)

Secondary data collection: Training schedules and training sheets

Data analysis – Done with the help of MS-Excel sheets. The data of pre and post training analysis was done with the help of graphs.

Ethical Considerations-

Privacy
Confidentiality
Support
Explanation

INTRODUCTION

Hospital Emergency Codes are used in hospitals worldwide to alert staff to various emergencies.

The *use of codes* is intended to convey essential information quickly and with minimal misunderstanding to staff, while preventing stress and panic among visitors to the hospital.

They enable a concise means of ensuring staff receive a common message, signalling the need for an urgent response without unnecessarily alerting or alarming patients, residents, or visitors.

Code red

Refers to a message announced over a hospital's public address system warning the staff of

A *fire* occurring in the facility, indicating that emergency measures should be taken

Code blue

Refers to an *medical emergency situation* calling for a resuscitation following a cardiac attack.

There is a small window of recovery in such situations. Code Blue situation can rise anytime without any prior notice. When such a situation arises, it is important to rustle up a medical team in seconds, to counter the emergency situation. Sometimes this is not possible. And the patient dies.

Code grey

A message announced over a hospital's public address system, indicating the need for an emergency management response to

(1) A combative person with no obvious weapon
(2) Real or perceived act of *terrorism* from conventional, nuclear, biologi -cal or chemical agents, or other security emergency

Code yellow

A message announced over a hospital's public address system alerting the staff and the need to prepare for:

(1) A pending emergency or *external disaster*—
e.g., multitrauma, major effects of storm, etc.

(2) A severe weather alert

Code brown

A message announced over a hospital's public address system alerting the staff and the need to prepare for

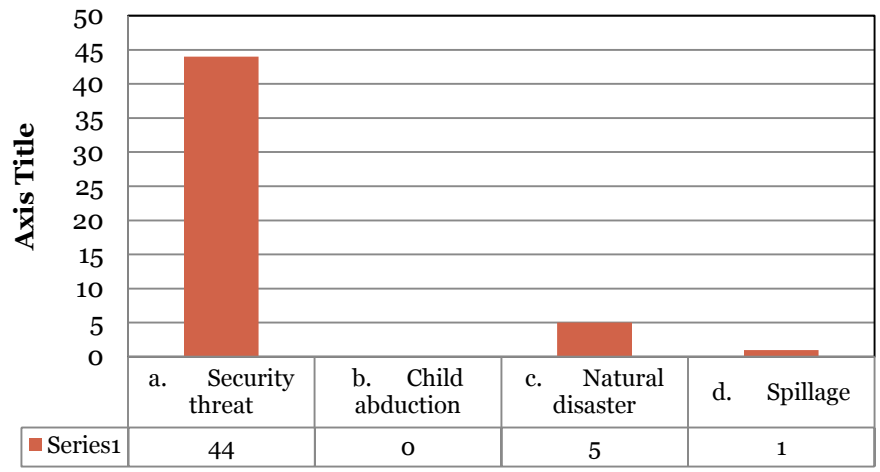
- *Chemical spill*

Code pink

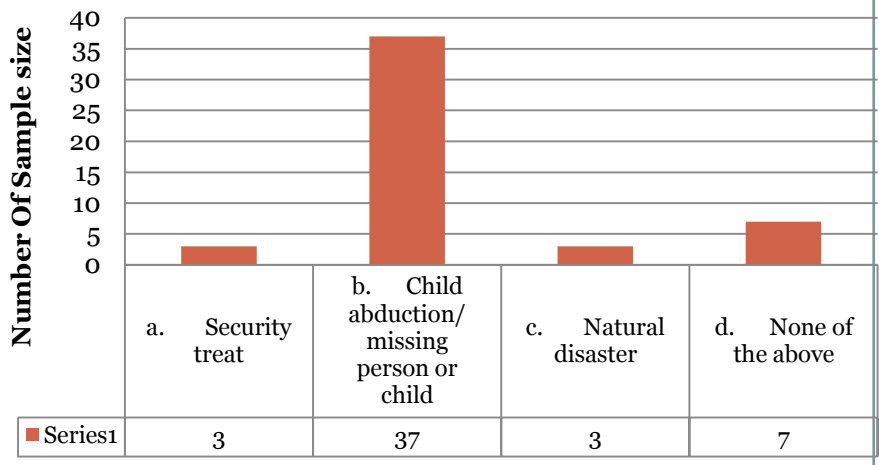
A message announced over a hospital's public address system warning the staff of

(1) *an infant abduction*

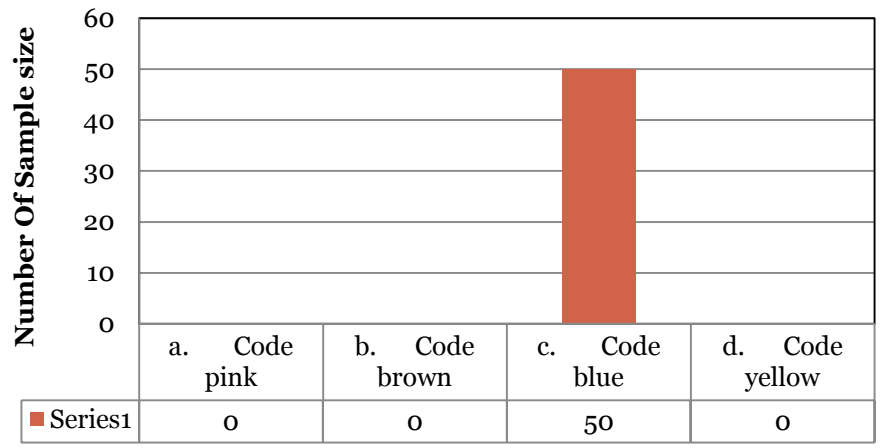
Code grey is announced when



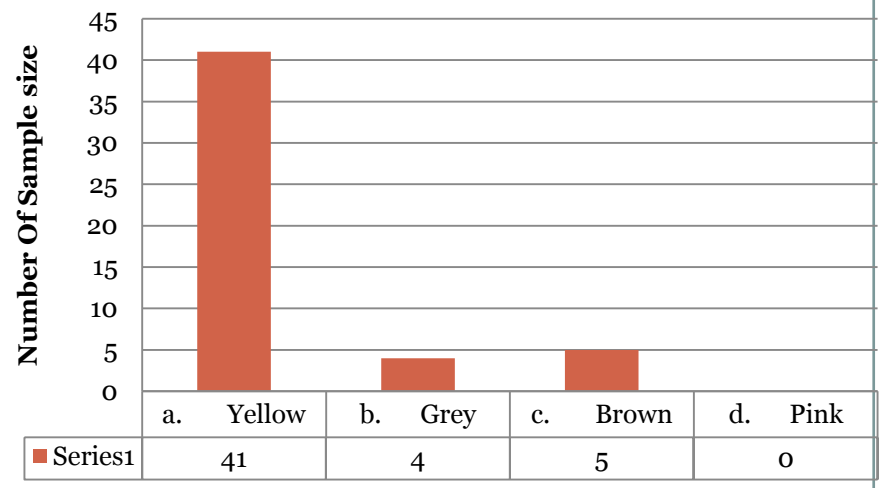
CODE PINK is for

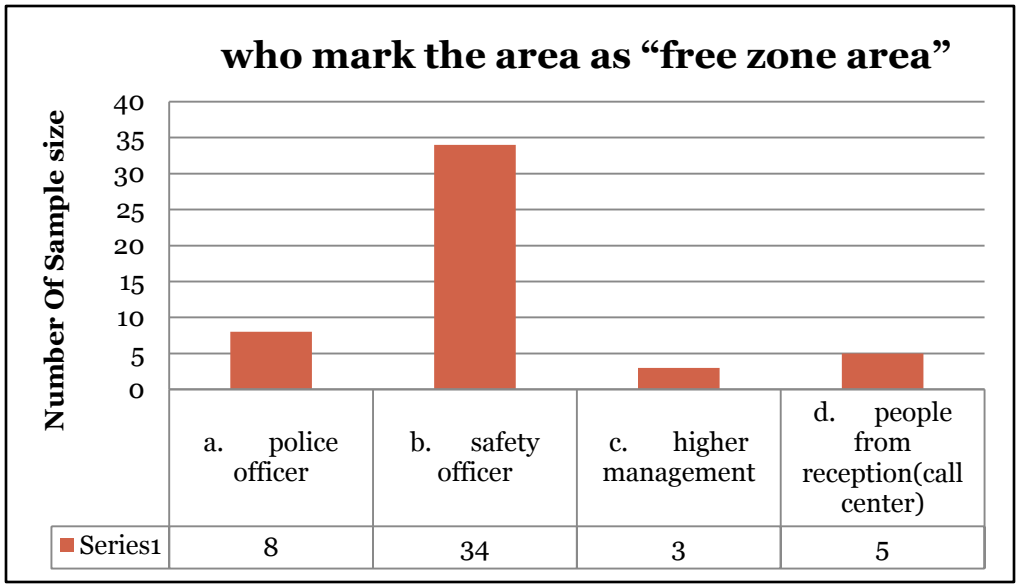


Which Code is for medical emergency?

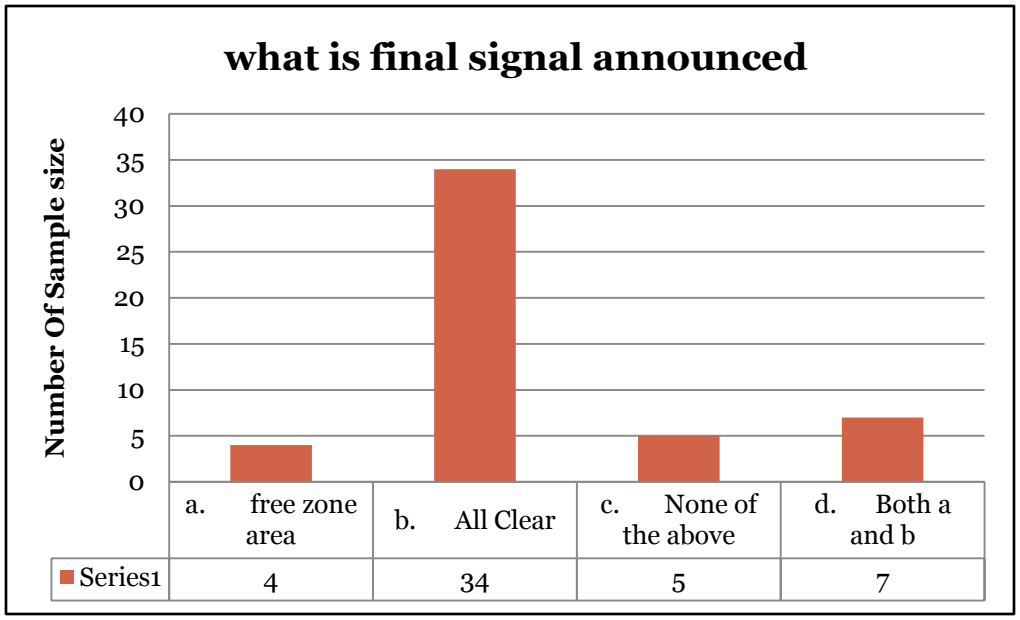


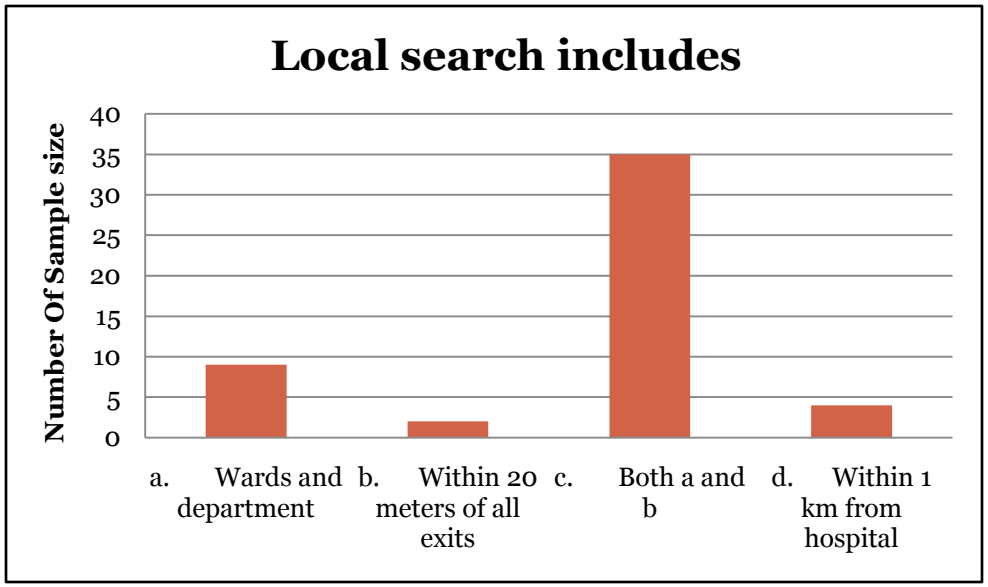
Code for Natural hazards



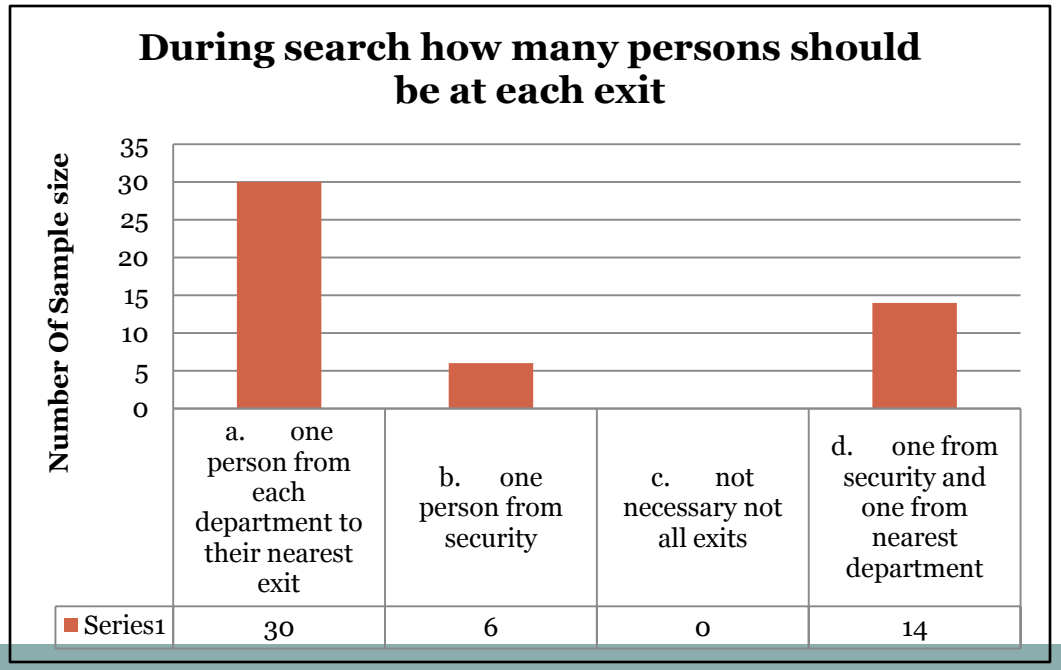

who mark the area as “free zone area”
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. police officer
b. safety officer
c. higher management
d. people from reception(call center)
Series1
8
34
3
5

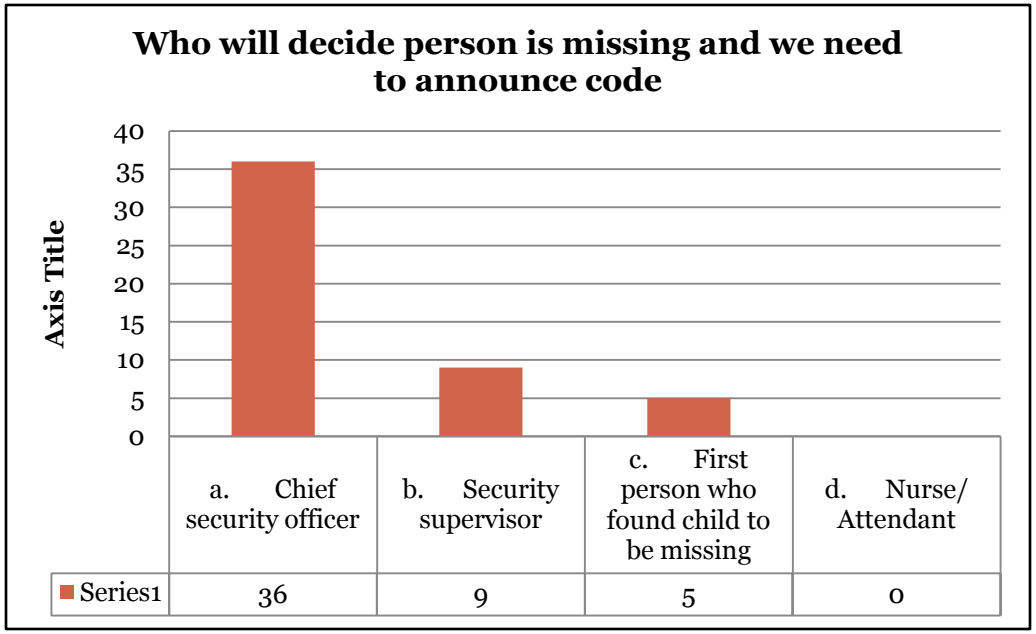
CODE GREY

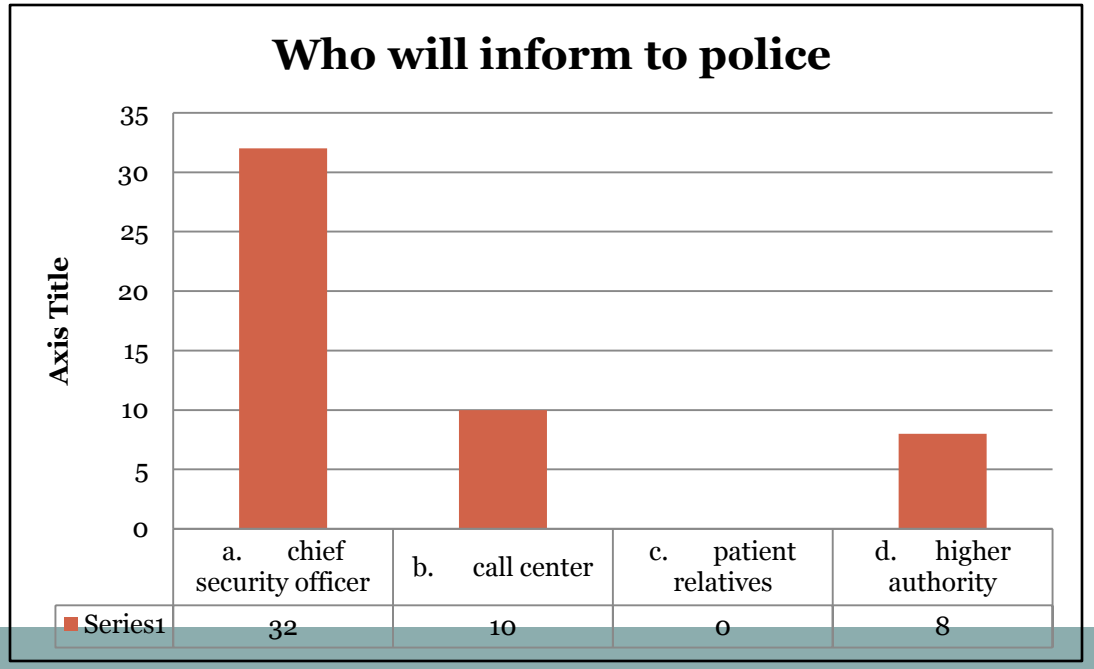

what is final signal announced
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. free zone area
b. All Clear
c. None of the above
d. Both a and b
Series1
4
34
5
7


Local search includes
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. Wards and department
b. Within 20 meters of all exits
c. Both a and b
d. Within 1 km from hospital

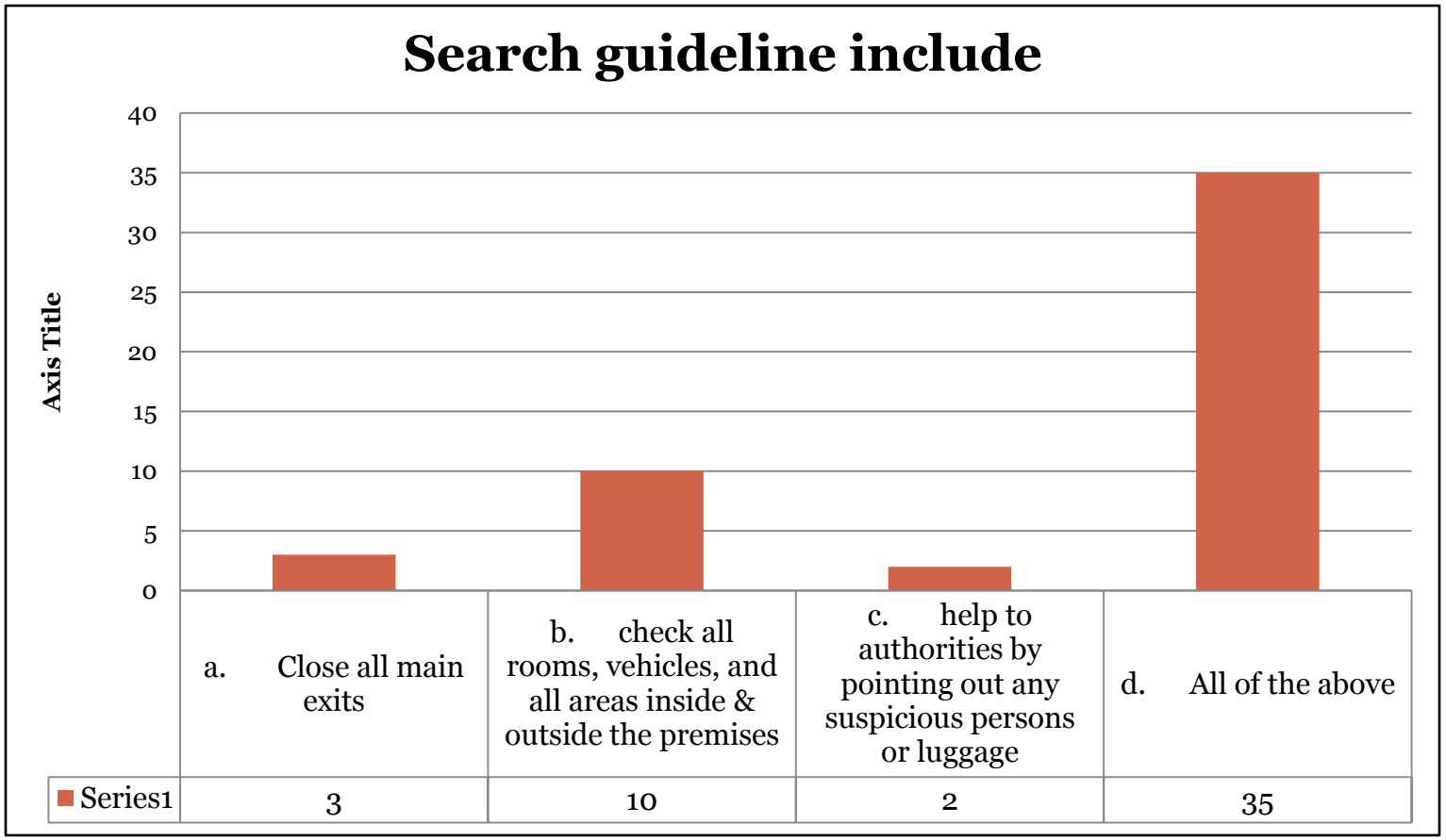
CODE PINK


During search how many persons should be at each exit
Number Of Sample size
35
30
25
20
15
10
5
0
a. one person from each department to their nearest exit
b. one person from security
c. not necessary not all exits
d. one from security and one from nearest department
Series1
30
6
0
14

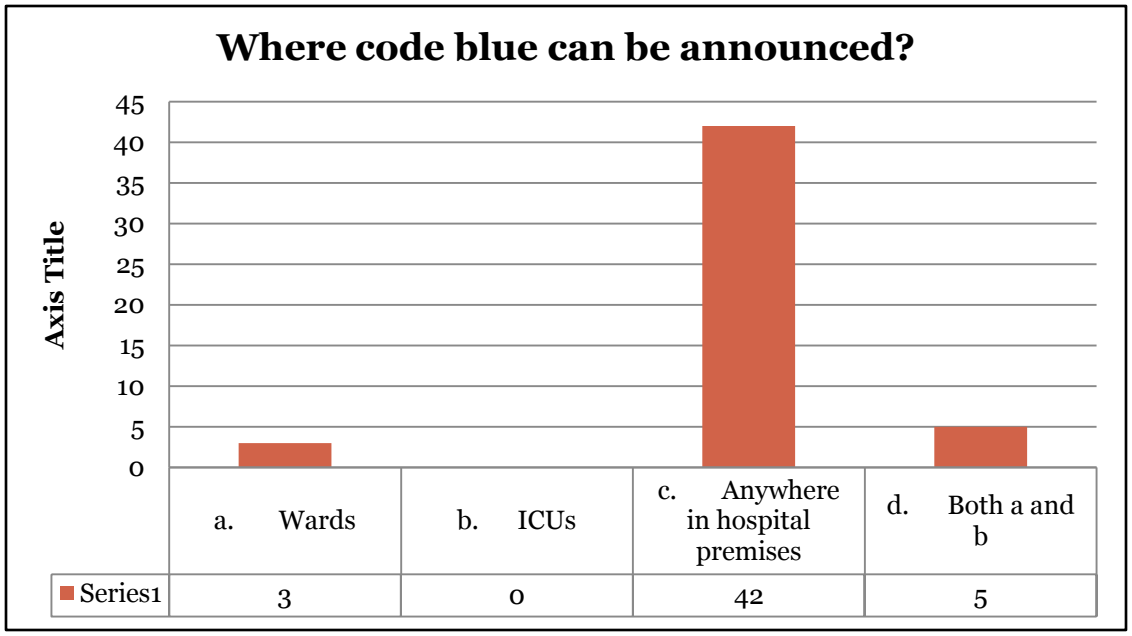

Who will decide person is missing and we need to announce code
Axis Title
40
35
30
25
20
15
10
5
0
a. Chief security officer
b. Security supervisor
c. First person who found child to be missing
d. Nurse/ Attendant
Series1
36
9
5
0

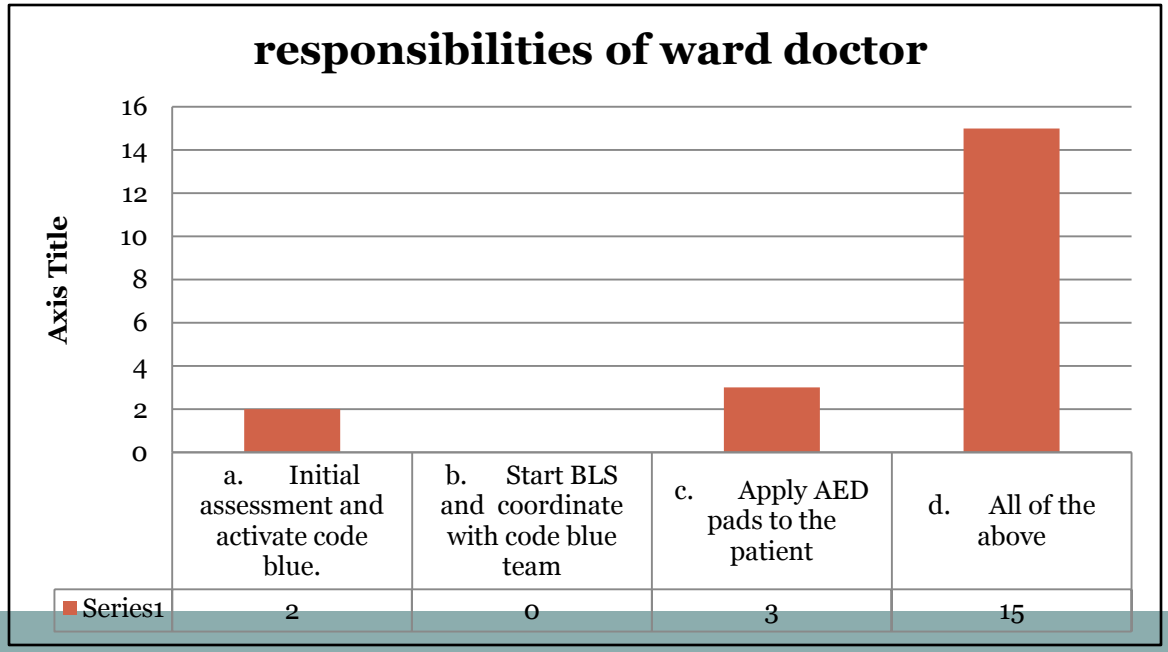

Who will inform to police
Axis Title
35
30
25
20
15
10
5
0
a. chief security officer
b. call center
c. patient relatives
d. higher authority
Series1
32
10
0
8

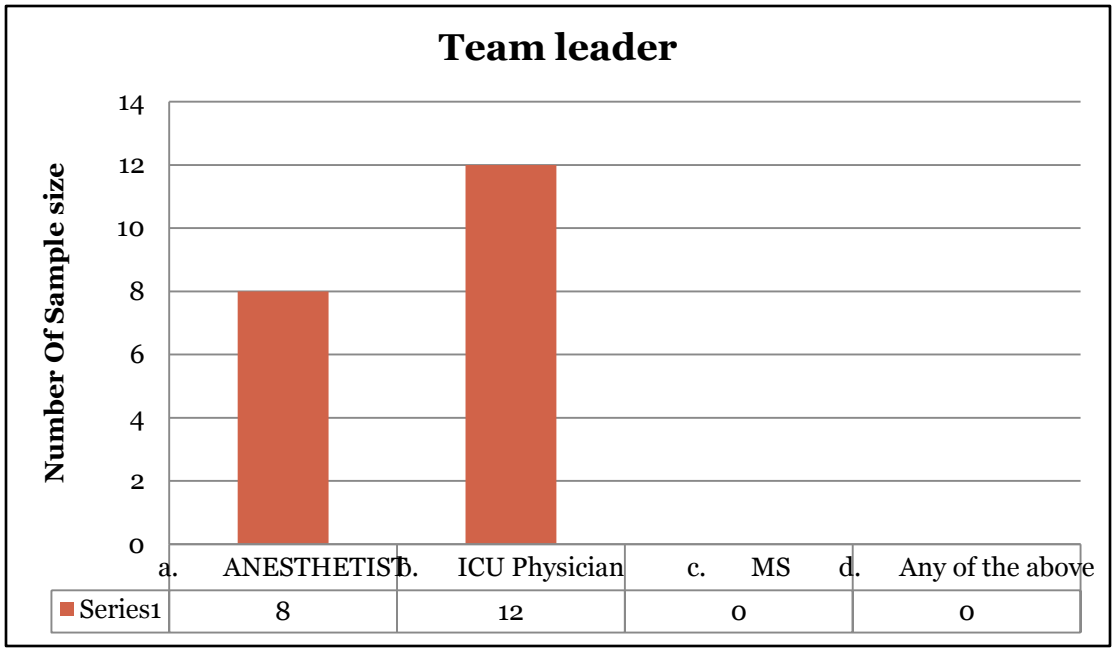
Search guideline include

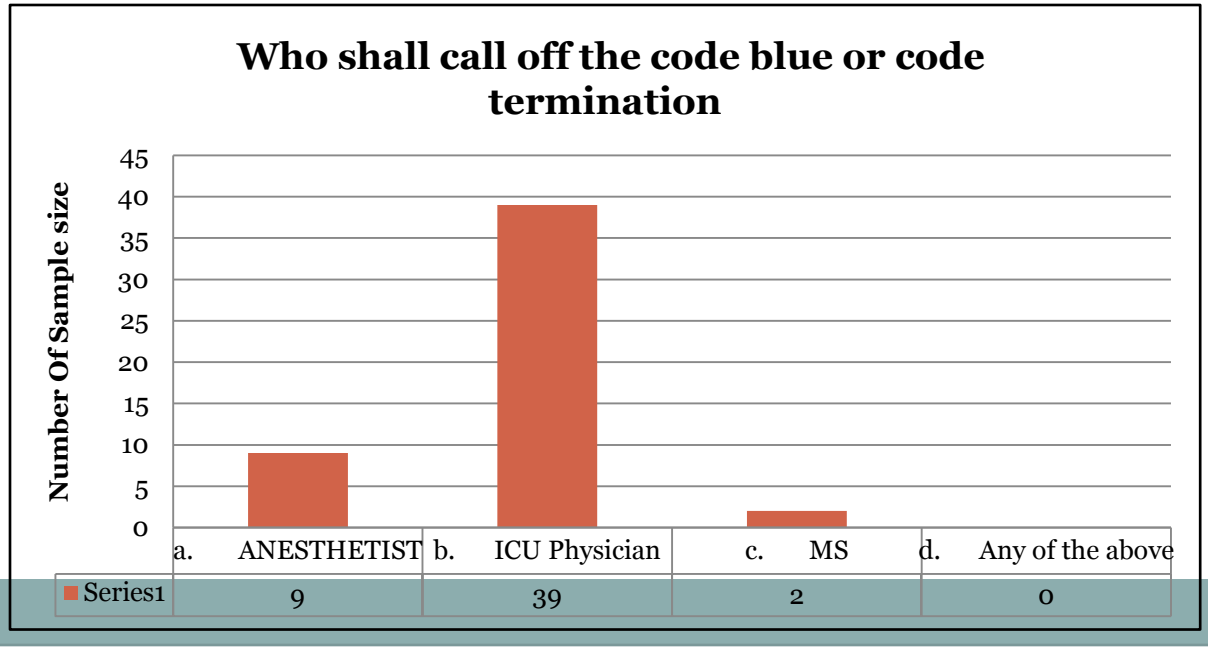


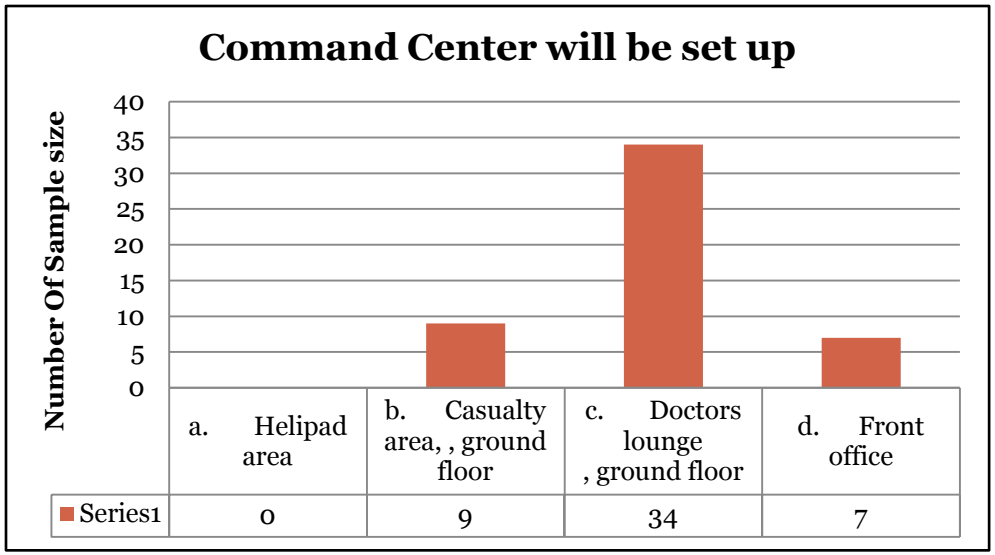
CODE BLUE


Where code blue can be announced?
Axis Title
45
40
35
30
25
20
15
10
5
0
a. Wards
b. ICUs
c. Anywhere in hospital premises
d. Both a and b
Series1
3
0
42
5

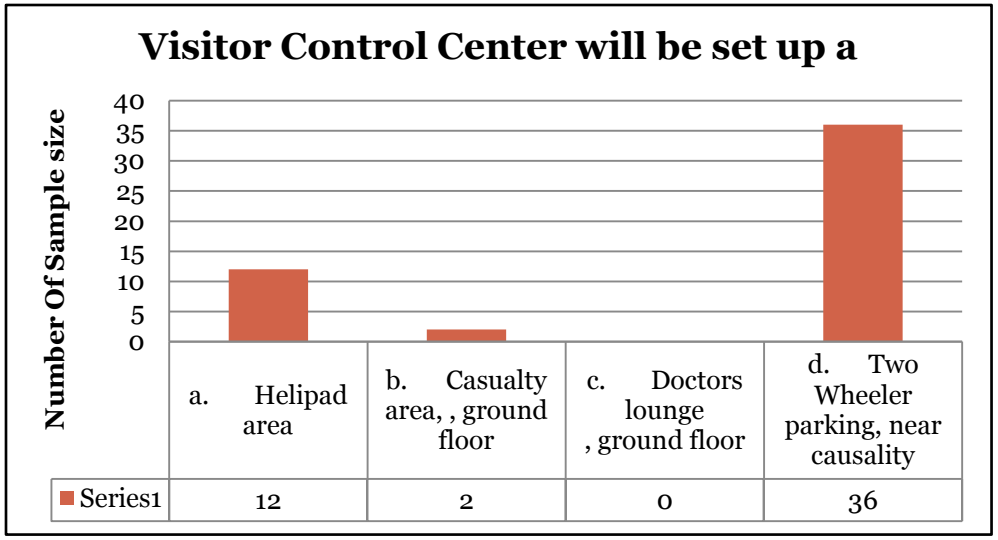

responsibilities of ward doctor
Axis Title
16
14
12
10
8
6
4
2
0
a. Initial assessment and activate code blue.
b. Start BLS and coordinate with code blue team
c. Apply AED pads to the patient
d. All of the above
Series1
2
0
3
15

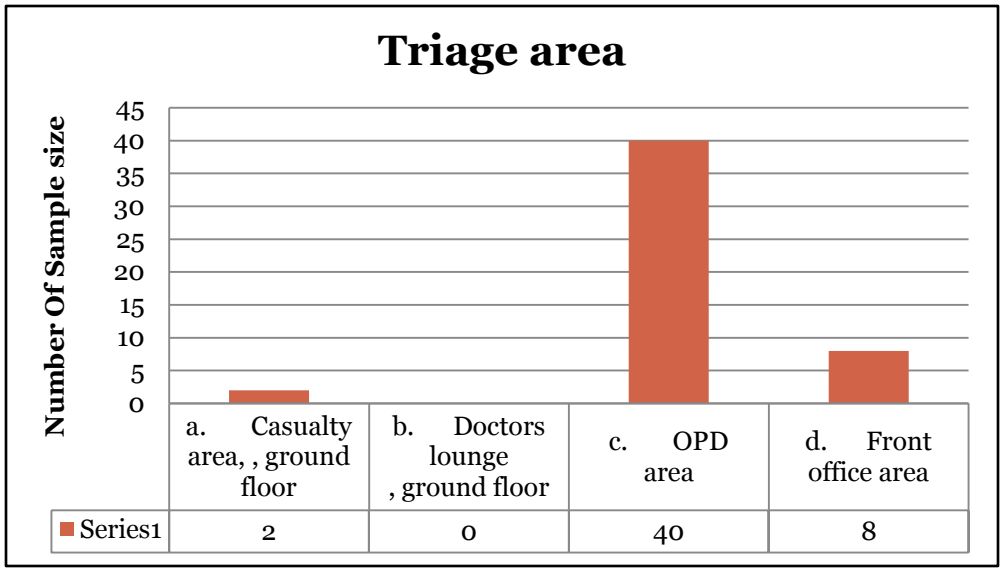

Team leader
Number Of Sample size
14
12
10
8
6
4
2
0
a. ANESTHETIST
b. ICU Physician
c. MS
d. Any of the above
Series1
8
12
0
0

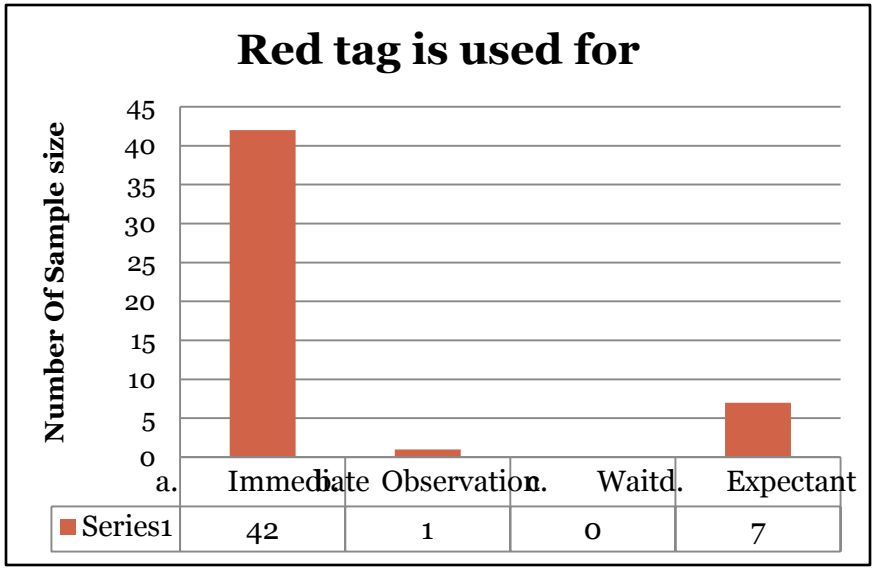

Who shall call off the code blue or code termination
Number Of Sample size
45
40
35
30
25
20
15
10
5
0
a. ANESTHETIST
b. ICU Physician
c. MS
d. Any of the above
Series1
9
39
2
0

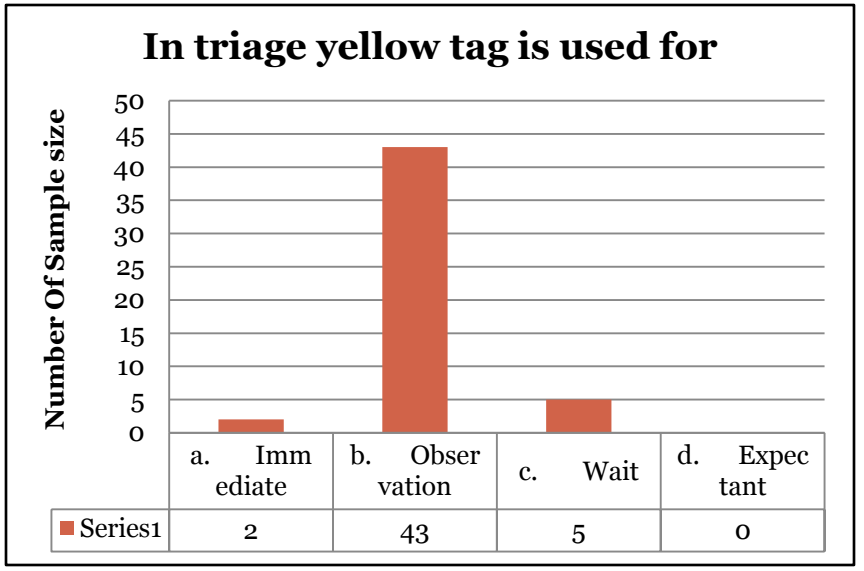

Command Center will be set up
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. Helipad area
b. Casualty area, , ground floor
c. Doctors lounge , ground floor
d. Front office
Series1
0
9
34
7

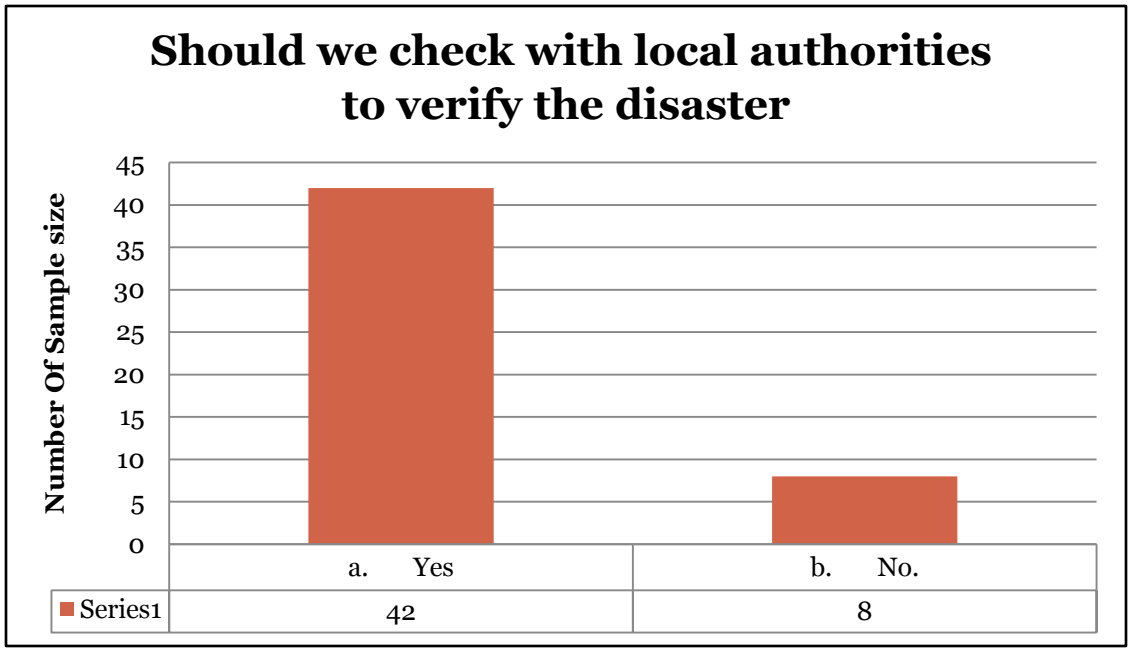
CODE YELLOW

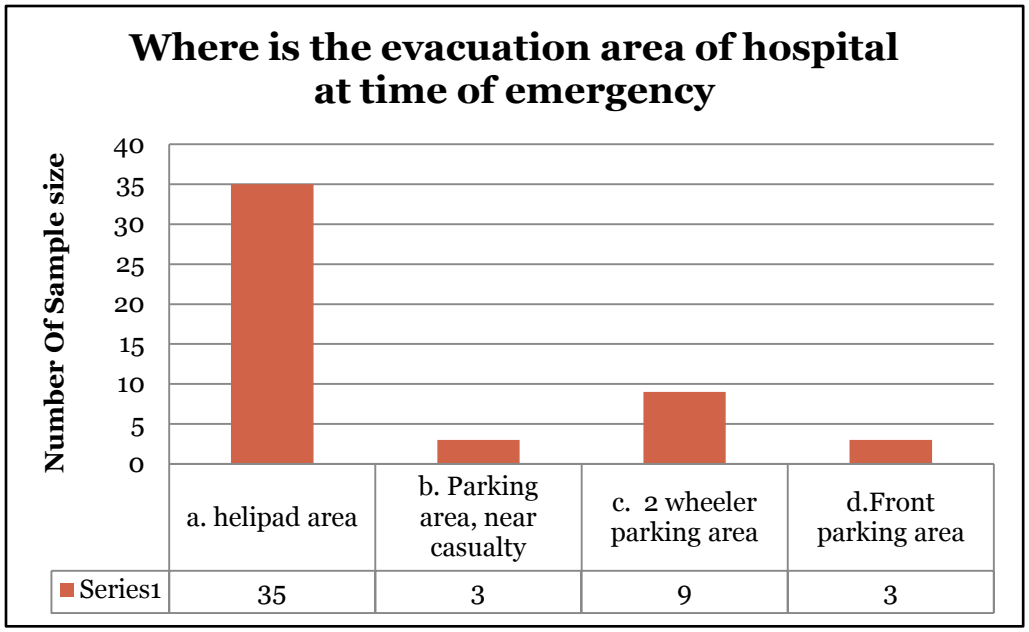

Visitor Control Center will be set up a
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. Helipad area
b. Casualty area, , ground floor
c. Doctors lounge , ground floor
d. Two Wheeler parking, near causality
Series1
12
2
0
36


Triage area
Number Of Sample size
45
40
35
30
25
20
15
10
5
0
a. Casualty area, , ground floor
b. Doctors lounge , ground floor
c. OPD area
d. Front office area
Series1
2
0
40
8

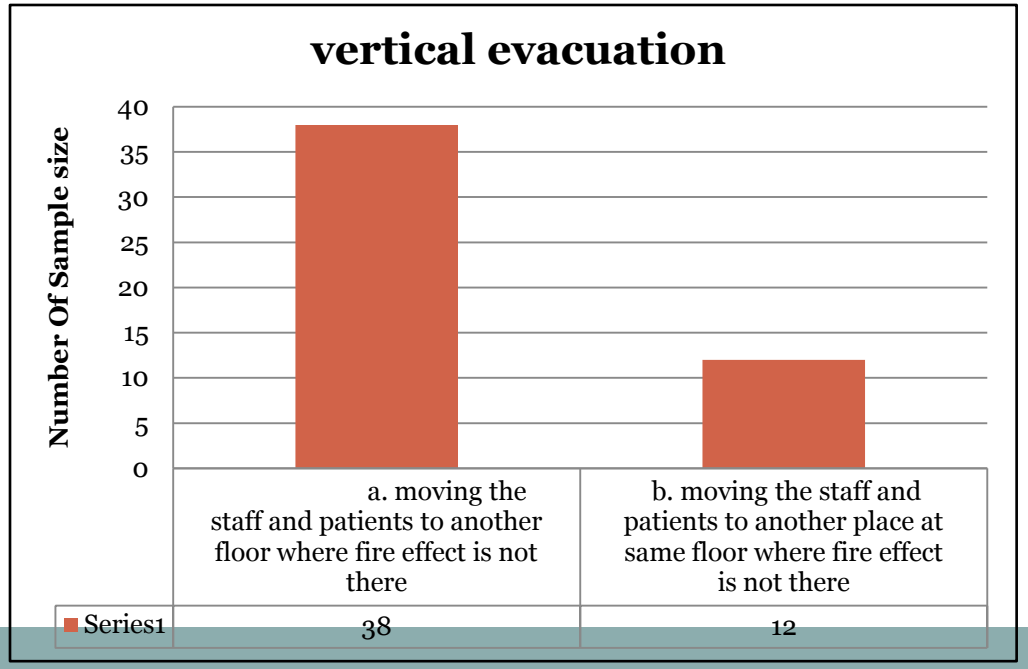

Red tag is used for
Number Of Sample size
45
40
35
30
25
20
15
10
5
0
a. Immediate
b. Observation
c. Wait
d. Expectant
Series1
42
1
0
7


In triage yellow tag is used for
Number Of Sample size
50
45
40
35
30
25
20
15
10
5
0
a. Immediate
b. Observation
c. Wait
d. Expectant
Series1
2
43
5
0


Should we check with local authorities to verify the disaster
Number Of Sample size
45
40
35
30
25
20
15
10
5
0
a. Yes
b. No.
Series1
42
8


Where is the evacuation area of hospital at time of emergency
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. helipad area
b. Parking area, near casualty
c. 2 wheeler parking area
d.Front parking area
Series1
35
3
9
3

CODE RED


vertical evacuation
Number Of Sample size
40
35
30
25
20
15
10
5
0
a. moving the staff and patients to another floor where fire effect is not there
b. moving the staff and patients to another place at same floor where fire effect is not there
Series1
38
12

CONCLUSION AND RECOMMENDATIONS:

It was seen that training helps in updation of knowledge and awareness among staff. It also reduces the reaction time and help in proper handling of the situations. But it should be continuous and repetitive.

•ID card- emergency codes and emergency contact numbers can be written at back.

•Trainings should be schedule with proper interaction with departmental HOD for staff scheduling and timing to provide maximum staff for proper training.

•Reassessment of the training should be done under the supervision of HR department to get the original answers.

•Videos and snaps of mockdrills should be shown in auditorium for self assessment of staff- so that they can realize their mistakes and can improve their actions.

•It can also be used for appraisal of the staff and can be promoted as 'role model' for his good work.

•Reassessment score can be awarded with rewards- role model title and can be displaced in notice board.

•Training topics can be repeated to brush up their knowledge and help in retaining.

•Inter hospital trainings can be conducted to learn new ideas of evacuation.

•Trainings can also be done by experts – fire department, trauma centers, security agencies, etc for proper and improved handling of situations.

BIBLIOGRAPHY

1] Manuals from Apollo BSR Hospital.

2]http://medical-dictionary.thefreedictionary.com/

3] http://www.euro.who.int/

4] Hospital emergency response checklist - An *all-hazards* tool for hospital administrators and emergency managers
Supported by
The European Commission Health Programme2008

THANK YOU…