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## **RESEARCH ARTICLE**

### PERCEPTION, TRAINING, AND AWARENESS OF COMPREHENSIVE EMERGENCY MANAGEMENT (CEM) AMONG HOSPITAL STAFF

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ABSTRACT

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\*Corresponding author: Dr. Sami O. Baarimah This research studies the perception, training and awareness of Comprehensive Emergency Management (CEM) among hospital staff. A structured questionnaire was used to collect information from 1060 healthcare professionals. This covered their demographics, how important they think CEM is, how familiar they are with emergency procedures, confidence levels in emergencies, and the challenges faced in introducing CEM. Results revealed that while a significant majority recognized the importance of CEM, familiarity, and training levels were inadequate. The research shows that there are large gaps in the knowledge and training used. Therefore, other people will need to do extra education to enhance emergency preparedness and patient safety in hospitals.

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## **INTRODUCTION**

The healthcare environment can experience emergencies which require appropriate action intervention. or Comprehensive Emergency Management (CEM) is a plan for the preparation of healthcare facilities for disasters that improves coordination and communication of department for the safety of patients and employees. Although it is important, the comprehension and awareness regarding CEM among the personnel of the hospital, especially Emergency doctors, who are the first responders to crisis are not studied much. The aim of this study is to assess the level of knowledge and perception of the staff regarding CEM in a hospital.

## METHODOLOGY

A cross-sectional survey was carried out using a questionnaires designed for the study using primary data. 1060 (doctor, nurse, technician and admin staff) were the respondent. The questionnaire consisted of sections covering details like demographics, job title, knowledge of CEM,

training received recently, and importance of CEM, confidence in responding to emergencies, experience in emergencies drills, and the adequacy of resources for the implementation of emergency management, updates on disaster preparedness, challenges of CEM implementation, and willingness to take up further training. Data were examined quantitatively to identify trends, patterns and possible correlations.

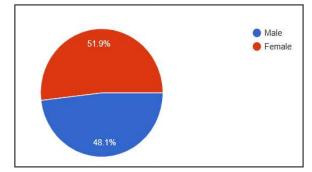


Figure 1. Demographics Gender Distribution Among the participants

## RESULTS

Demographics Gender Distribution Among the participants, 510 (48.1%) were male, and 550 (51.9%) were female, indicating a slight female majority (Figure 1) Over half the participants were doctors (600, 56.6%) and other RNs (190, 17.9%). Then, there were technicians (90, 8.5%), admin (60, 5.7%), and others (120, 11.3%) (Figure 2)

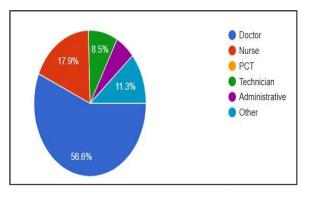


Figure 2. Job title of the participants distribution

### Understanding Levels of Familiarity with CEM

A significant portion of the healthcare professional staff expressed that they are very familiar or somewhat familiar to **Comprehensive Emergency Management** it with the Very Familiar: 170 (16%) Somewhat Familiar: 420 (39.6%) Not very Familiar: 250 (23.6%) Not Familiar at All: 220 (20.8%) This basically means that only 55.6% of the staff have at least somewhat familiar to it which is big knowledge gap in this area (Table 1)

Table(1): understanding of Comprehensive Emergency Management ( CEM )		
Ver Familiar	170	16%
Somewhat familiar	420	39.60%
Not very familiar	250	23.60%
Not familiar at all	220	20.80%
Total	1060	100.00%

## About receiving any training or education on CEM within past year was as follows:

- Yes: 230 (21.7%)
- No: 710 (67%)
- Not Sure: 90 (8.5%)
- N/A: 30 (2.8%)

Most people (67%) reported they have not received a training program recently indicating a possible improvement area in training Hospital staff (Table 2).

Regarding, the Significance of Comprehensive Emergency Management to be Knowledgeable about it, the participants replay of extreme importance to 50% of our participants. And, very important for 40% of them. Thus, a combined total of 86.8% view CEM as important or extremely important, and appear to be aware of the importance of CEM (Figure 2).

Table ( 2 ): Receiving any training or education on CEM within the past year		
Yes	230	21.70%
No	710	67%
Not sure	90	8.50%
N/A	30	2.80%
Total	1060	100.00%

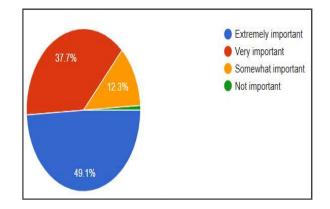


Figure 2. Significance of Comprehensive Emergency Management to be Knowledgeable about it

Trust in Comprehensive Emergency Management, A whopping 280 (26.4 per cent) feel very confident, A chunk of 500 (47.2 per cent) feel somewhat confident, 240 (22.6 per cent) feel not very confident, Only 40 (3.8 per cent) feel not confident at all (Table 3).

Table ( 3 ): Confidence to had ability to respond effectively in an emergency situation at the hospital		
Very Confident	280	26.40%
Somewhat confident	500	47.20%
Not very confident	240	22.60%
Not confident at all	40	3.80%
total	1060	100.00%

Though some three-quarters (73.6 per cent) feel at least somewhat confident, a good number does not have the confidence level to deal with an emergency.

### **CEM Exercise - Participation in Drills**

Most of our respondents have not ever partaken in any CEM exercise (53.8%) which could have a link to the lower confidence and preparedness levels they exhibit.

### **Sufficiency of Resources**

Yes, absolutely: 370 (34.9%); Yes, to some extent: 460 (43.4%); No, not really: 210 (19.8%); No, not at all: 20 (1.9%). Only 34.9% of staff felt confident about the adequacy of resources available as of date, suggesting a perception of a shortfall in support (Table 4)

Table (4): Have you ever participated in a CEM exercise or drill at the hospital		
Yes	360	34%
No	570	53.80%
Not sure	120	11.30%
N/A	10	0.90%
total	1060	100.00%

**How often do you receive updates?:** According to the statistics: Regularly, 200 (19.2%) Occasionally, 350 (33.7%) Rarely, 380 (35.6%) Never, 130 (11.5%) A considerable 35.6% say they receive these updates on rare occasions, possibly affecting their state of preparedness (Figure 3)

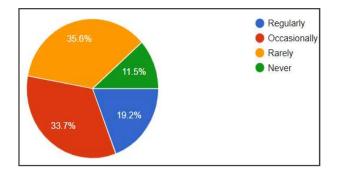


Figure 3. How frequently do you receive updates or information about emergency preparedness at the hospital.

Regarding, Obstacles to Implementation of Comprehensive Emergency Management, Not having enough training came first, followed by insufficient resources, faulting communication, and not considered one by administration. The above training and resources failures were important considerations in making CEM work (Table5)

Table (5): How frequently do you receive updates or information about emergency preparedness at the hospital		
Regularly	200	19.20%
occasionally	350	33.70%
Rarely	380	35.60%
Never	130	11.50%
Total	1060	100.00%

On other hand the Interest in Further Training Likelihood of Taking More Training, Most Participants have opportunities to get training to enhance their preparedness. As such, Participants in the survey stated how likely they will get training in response to the opportunity. Most survey respondents said they were very likely or somewhat likely to get training. On the contrary, only a small percentage said they were not likely at all. 30 respondents said they were not likely at all (Figure 4)

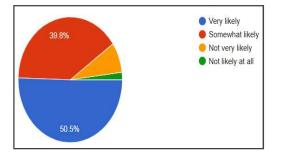


Figure (4). How likely are you to seek out additional training or resources on CEM in the Future

Almost 89% of the respondents feel that the implementation of CEM will benefit the organization in one way or the other. The different options given by the respondents and their preferences are as Improvement in Response Times 510 (48%), Better Coordination Between Departments 430 (41.2%), Better Communication 120(10.8%), Not Related At All 0 (0%) (Figure 5)

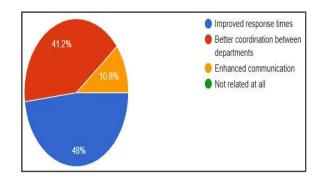


Figure 5. How do you think CEM can positively impact the safety and security of patients and staff at the hospital

Regardingbelieve in prioritizingawareness, Yes, most definitely: 750 (71.2%), Yes, somewhat: 290 (26.9%), No, not really: 20 (1.9%), No, not at all: 0 (0%), Most of the people say that we need to increase the awareness of CEM which shows their consequence positively critical (Table 6)

Table (6): Do you believe that raising awareness about CEM among hospital staff is a priority for the organization		
Yes, definitely	750	71.20%
Yes, somewhat	290	26.90%
No, not really	20	1.90%
No, not at all	0	0%
Total	1060	100.00%

The survey results show that more than half of them have faced real emergencies which speaks volumes for the need for training and preparedness.

## DISCUSSION

A survey was conducted among 1060 respondents according to which majority of them did not seem to think the hospitals were very prepared to handle the COVID-19 crisis. The results were rather as follows: 270 (25.7%) Very Prepared, 560 (53.3%) Somewhat Prepared, 210 (19%) Not Very Prepared 20 (1.9%) Not Prepared at All. Overall only 25.7% rated the hospital as very prepared which means there is some scope for improvement. There is a widely recognized perception that CEM is important, yet a lot of people have lived experience and training. The data shows that although both doctors and staff at hospitals understand the essential work of CEM, there is a compelling need for proper and regular training programs. The problems pinpointed, especially the lack of training and resources, strengthen the view that lots of healthcare facilities may not be ready to deal with emergencies. In addition, staff show a readiness and willingness to undergo further training. Moreover, the staff's recognition of the potential positive effects of CEM reflects a significant readiness for

improvement at our hospitals. These findings call on hospital administrators to promote CEM initiatives. They also provide a framework for developing targeted training programs to address knowledge and skill gaps.

## CONCLUSION

The Conclusion of this study has shown gap of awareness/training and resource in Comprehensive Emergency Management among the hospital staffs. Even though CEM is perceived as very important, CEM familiarity and preparedness are low. In order to improve emergency response capabilities of health care institutions, regular CEM training, sufficient resources and a culture of pro-active emergency management. By dealing with these gaps, hospitals can enhance their emergency preparedness and boost the safety of patients and staff.

#### List of Abbreviations

- CEM: Comprehensive Emergency Management
- PCT: Patient Care Technician
- N/A: Not Applicable

This detailed analysis not only comprehensively reviews the presented data but also highlights areas that require attention and improvement within hospital emergency management practices.

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