

Perception of Emergency Medicine as a Medical Specialty among the General Public of India: A Descriptive Study

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ABSTRACT

Background: India has struggled in establishing Emergency Medicine (EM) as a medical specialty, and providing emergency medical care. In the current scenario of India, EM is a young speciality which is in its nascent stage of development. In the past 20 years, significant progress has been made, but there is a broad estimate that over a million deaths happened in this country because of suboptimal care during the 'Golden Hour', or due to a lack of knowledge about an Emergency Department (ED). When the knowledge and awareness about the ED and Emergency Physicians (EP) fail to impress the patient or patient's attenders, then this question arises.

Materials and methods: This study was a cross-sectional Pan-India study which was conducted using a questionnaire that asked participants about their awareness and opinion of EM as a medical speciality.

Result: Among a Pan-India sample size of 1,010 majority of the participants were from the state of Odisha. Total of 74.51% considered EM as a distinct medical speciality. Emergency Physicians treated 89.71%. Participants of 63.35% chose to visit the ED when their primary caregiver or general practitioner was unavailable whereas only 39.56% visited the ED for serious medical illnesses.

Conclusion: The participants of this survey had an encouraging perception of EM as a speciality and EPs as medical specialists. However, they have limited knowledge and poor expectations with regard to the ED as an autonomous department.

Keywords: Emergency department, Emergency medicine, General public perception, India, Medical speciality.

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INTRODUCTION

India has struggled in establishing Emergency Medicine (EM) as a speciality and providing Emergency Medical Care. Since 1999 doctors interested in this field undertook from 6 months to 2 years of diploma/fellowship courses by working in casualty to become Emergency Physicians (EP). It was in 2008 when a white paper was published on academic EM in India by the Indo-US joint working group after which things started rolling. This paper put forward a standardised curriculum for EM in India. Finally, after 10 years, on 21st July 2009, EM was officially recognised as a branch of Medicine by the Medical Council of India.^{1,2}

In the current scenario of India, EM is a young speciality which is in a nascent stage and has acquired utmost importance across India, both in urban and suburban regions. In the last 20 years, significant progress has been made with the help of a handful of enthusiastic doctors dedicated to the field of emergency. Receiving timely emergency care is the right of every patient. It is also hence called the speciality of the current century.³

The General Public as well as the doctors need to recognise EM as a separate speciality and the Emergency Department (ED) as an independent department.⁴ Patients feel that the ED is a place where they will be promptly looked after even for the minutest of complaints or is a fast track department.

Many times, we receive patients in acute emergencies from the Out Patient Department (OPD) due to a lack of knowledge about the ED. Such patients end up having poor prognosis or die due to late presentations.⁵

On the other hand, there is a lack of awareness among the general public about an emergency event. Even if they know about

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an emergency event; they don't know how to reach a hospital or an ED. There is a broad estimate that over a million deaths happened in this country because of suboptimal care in the golden hour or due to a lack of knowledge about an ED.⁶

To avoid such confusion, morbidity and mortality a survey was done among the general public about EM as a speciality and also enlighten us about the expectations of them from this branch.^{7,8}

As the incidents of motor vehicular accidents, acute strokes, and myocardial infarction have increased in recent years, the role of emergency departments with skilled and trained emergency personnel becomes critical in saving precious lives. But when the knowledge and awareness about the ED and EP succumbs before the patient or patient's attenders, then the question arises regarding the adequate awareness, and knowledge of the general public regarding EM as a separate speciality.

Hence a survey was needed to be done to figure out the perception of EM as a separate specialty among the general public.⁹

This study was a cross-sectional study which was conducted using a questionnaire that asked participants about their awareness and opinion of EM as a specialty. The results of this study will enable us to ascertain the level of awareness of EM among the population and address any misconceptions if they exist.^{10,11}

OBJECTIVES AND HYPOTHESIS

To find out the perception among the general public of:

- Emergency Medicine as a separate medical speciality.
- Emergency Department as a distinct autonomous department.
- Emergency Physicians as medical specialists.
- To find out the expectations of general public of India.

The Hypothesis

In India, a significant number of people do not consider EM a separate speciality. There is less awareness about the nature of the job of the ED, due to which they ‘lack to utilise the golden hour’ in acute emergencies. Most of the general public consider the ED as a ‘fast track department’.

MATERIALS AND METHODS

Participants for this study were citizens of India with various socioeconomic and educational backgrounds. The study population consisted of the participants who participated voluntarily. A valid informed consent was taken before the start of the survey from each participant.

Questionnaire

This study is a survey-based descriptive study. To fulfil this purpose a 20-items partly validated questionnaire was used. The questionnaire was divided into 3 parts. The first part of the questionnaire included seven demographic questions (from

questions 1 to 7) which included the participant’s age, gender, residing state, qualification and average annual household income. The rest of the questionnaire was divided into two parts to understand the public’s knowledge about the ED and their perception of EP. A pilot study was conducted with a printed form of questionnaire among a small group of people to enhance the reliability of the questionnaire, and to identify whether participants can understand the questions and give their answers.

Method of Data Collection

This survey was a web-based survey conducted through a survey site. <https://www.surveymonkey.com/>, a web link <https://www.surveymonkey.com/r/EMperception> was forwarded to several people using various social media platforms, requesting them to forward further to collect a maximum number of samples. The inclusion criteria for this study were being a citizen of India above 18 years of age. The participants less than 18 years old were not included in the survey as they are usually dependents and cannot make decisions on their own. The Ethical Committee clearance has been achieved by the Ethical Committee of the Advance Medical Research Institute (AMRI) Hospital. The data was entered into the survey monkey app and statistical analysis was done.

RESULTS AND DISCUSSION

This survey was conducted from 18 November 2019 to 9 March 2020. A total number of 1,010 responses were received. Out of which 734 were completed responses. A standardised script was included in the questionnaire asking for participants’ consent while emphasising that participation is voluntary and that they have the full freedom to decline participation.

The completion rate was 73%.

Figure 1 signifies a pan-India survey. The respondents to the survey were from all corners of the country except Ladakh, Mizoram, Puducherry and Nagaland. Most of the responses were

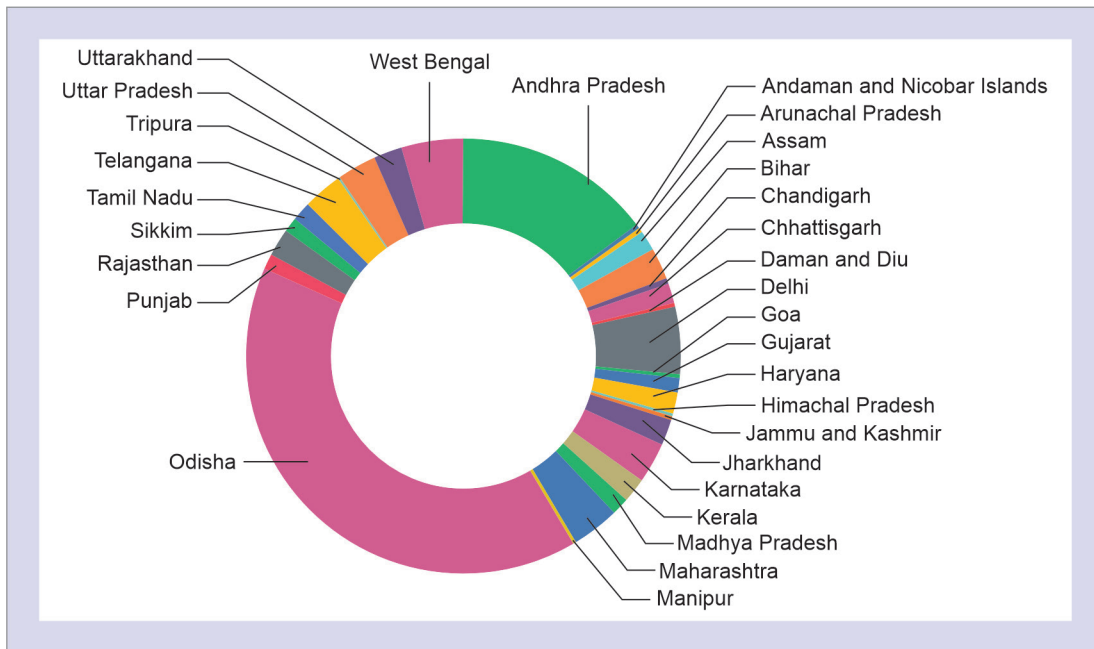


Fig. 1: State wise average distribution of participants across India

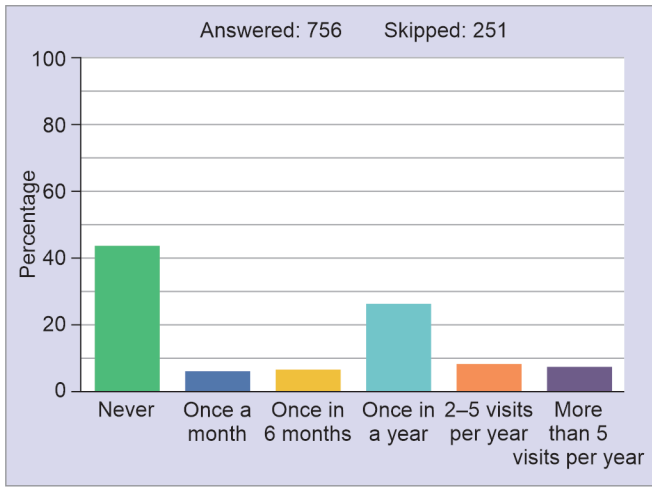


Fig. 2: Average frequency of visits to the ED

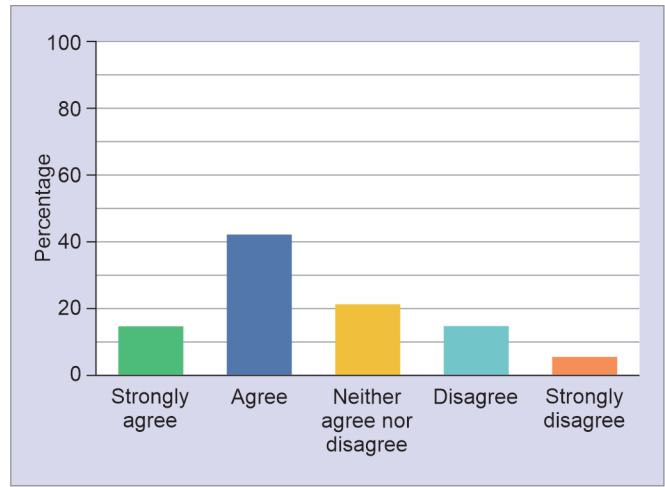


Fig. 3: Perception about ED being managed by junior doctors/general doctors/paramedics or nurses staff

Table 1: The reason for the last visit to the ED

Answer choices	Responses	Percentage
Seriousness of your medical condition	235	39.56%
Your regular/family doctor was unavailable	63	10.61%
You were referred by your regular doctor	67	11.28%
The emergency department is the nearest healthcare provider	108	18.18%
Care received at Emergency Department is better than OPDs or clinics	121	20.37%
Total	594	

from Odisha with a number of 357. The next maximum responses were received from neighbouring states like Andhra Pradesh and West Bengal. The high number of respondents from Odisha and Andhra Pradesh in the survey might be attributed to the fact that the survey was planned and initiated in Odisha. Around 440 respondents of the survey were in the age group of 25–35 years which is 49.27% of the total survey. In a similar survey done in Beirut, Lebanon by Mufarrij et al., the mean age of the participants was 40+/- 14 years. In the current study, 59.12% participants were male and 40.32% were female while the Beirut survey had more females. Our participants of 53.83% were graduates while 33.9% had done post-graduation or higher studies. This suggests that the survey was able to reach people with a good educational background while only 1 respondent was educated till school. About 45.03% of participants had annual income between 3 and 10 lakhs. The survey being a social media-based survey was unable to reach people of low-income groups due to low penetration of social media in such populations.

Figure 2 reveals that a maximum participants of 43.87% have never visited an ED which suggests that there is a low penetration of ED in our healthcare system or is not well recognised by the public. One of the probable reasons for this result might be the fact that the majority of the patients in India go to their primary doctor or OPDs even during medical emergencies rather than using the ED. As in (Table 1), when asked about the reason for their last visit to ED, 39.56% of the respondents chose to visit ED due to the seriousness of their medical condition while 20.37% of the participants chose to visit emergency department as they feel they

received better and faster care at emergency departments rather than OPDs and clinics. About 11.28% of the respondents said that they were referred to the ED by their primary healthcare providers. 63 out of 1010 respondents said they visited the ED only because their regular doctor was unavailable and 108 participants said they went to the ED as it was the nearest healthcare provider. On the contrary, a similar Zocdoc ER study done in 2019 found that ‘65% of Americans said they would go to the ER if they couldn’t get in to see a doctor quickly enough’ and 3 in 4 Americans thought it was easier to go to the ER than get a doctor’s appointment.¹⁰ The reason for these differences in perception between Indian and American masses can be attributed to the long wait times, given the average 24-day wait time to see a primary care physician in the US while in India private OPDs are very accessible to the public.

As we see in Figure 3, in response to the question if the emergency departments are managed by junior doctors/general doctors/paramedics or nursing staff, 42.53% agreed and 15.07% strongly agreed. Whereas 71% of the participants of the original study conducted in Beirut, Lebanon agreed that a general doctor could manage the emergency department. This suggests that a majority of Indians think that ED are manned by untrained professionals. This also presents a very dismal picture of how the Indian public perceives the ED. An overwhelming 89.71% of the participants wanted to be treated by trained EP in the ED during medical emergencies. As seen in Figure 4 similar expectations of the public were also reflected in the survey done in Lebanon where 78% of the respondents wanted their EP to be specifically trained in handling emergencies. This strongly implies the fact that in order to gain the confidence of the Indian masses in the ED, we need to increase the number of trained EP in the country. At this juncture, it seems quite difficult as at present there are less than 200 MCI-recognised seats in the country with a population of more than 1.3 billion.¹¹ This also suggests an urgent need to increase the training capacities and devise new strategies to train a very massive number of EP.

India’s healthcare has traditionally been a specialist-centric system where patients usually consult specific specialities decided as per their symptoms rather than general physicians as their primary health providers. This was reflected when 72.63% of the participants still wanted to be evaluated and managed by a

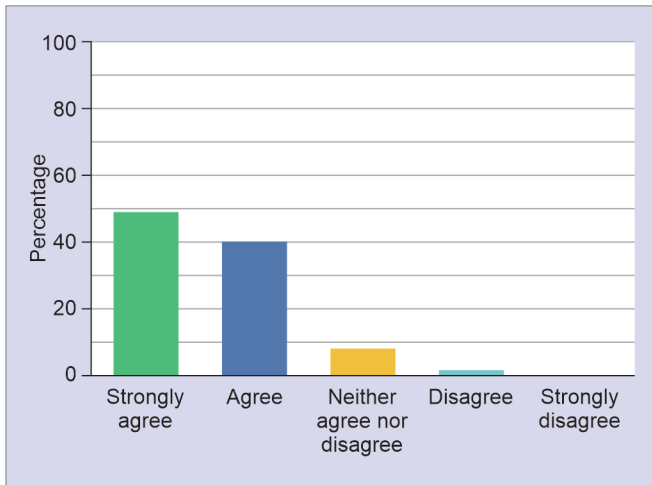


Fig. 4: In the ED, you should be treated by an EP trained in EM

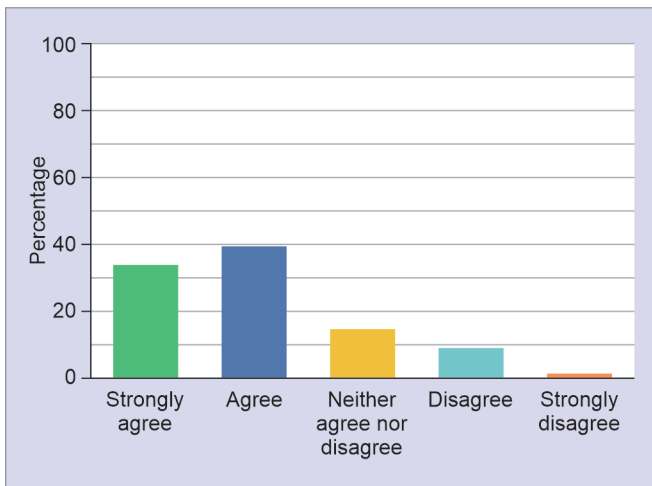


Fig. 5: Emergency medicine is a separate speciality of medicine

specialist related to their pertinent symptoms. Around 86% of Lebanese subjects also expressed their desire to be evaluated by specialists rather than EP related to their symptoms. This may be attributed to the fact that EM is very nascent in both countries where the scope and skill of EP are not well known by the masses. As EM develops and evolves, there might be a shift in this perception.

When asked whether they considered EM as a separate speciality of medicine, (Fig. 5) 34.59% strongly agreed and 39.92% agreed to the fact. This result was much better than in Lebanon, where only 51% agreed to the fact that EM was a separate medical entity. There is still a quarter of the population which doesn't recognise EM as a separate medical speciality. More than 85% of the respondents agreed with the fact that EP receive specialised training to develop skills to manage ED.

Out of (10) 7 respondents wanted EP to be able to make life-saving decisions while attending to their patients during a medical crisis.

The perception of the public in recognizing the important role in the overall treatment of the patients was also reflected in the study as 38.84% strongly agreed and 48.02% agreed. The

survey strongly suggests that the perception of the participants was favourable towards EM as a separate medical speciality with a distinct role and skills in patient management.

LIMITATIONS OF THE STUDY

As the survey was a web-based survey, it could not reach the people who do not own a smartphone or a computer or where there is no internet connection.

The survey also faced language barriers as it was done only in English and therefore could not reach people who do not understand English. It could also not include people with poor literacy and poor income groups. Moreover, there is an assumption that as the survey could not reach people with poor literacy and low income groups, it might not have had responses from rural areas.

CONCLUSION

This study was a questionnaire-based Pan-India online survey done to ascertain the perception of EM as a separate medical speciality among the General Public of India. To date, there is no data available about such a study conducted in India.

It is observed that 74.51% of participants in this study considered EM as a separate speciality. Therefore, there is still a need to spread awareness about EM among the remainder to curtail the losses of 'golden hour'. This might drastically decrease the number of patients with late presentations to the ED in India.

The results also enlighten us that there is an urgent need to escalate the number of trained EP as the expectations from the public are reasonable. 89.71% want to be treated by EP in an ED.

It seems that the participants of this study have an amateur knowledge of the work culture of ED. The results prove that the hypothesis of this study was true regarding the department being a 'fast track department' (78.99%). Also, 63.35% chose to visit the ED when their regular doctor was unavailable whereas only 39.56% chose to visit the ED for their seriousness of medical illness.

Hence we conclude that the participants of this survey have an encouraging perception regarding EM as a speciality and EP as specialists but have limited knowledge and inapt expectations with regard to the ED as an independent department.

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