Special Article

An academic emergency department: residents' perspective

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BACKGROUND: Since demographic changes have contributed to the growth of emergency medicine, a highly populous nation such as India needs to give physicians associated due credit and recognition. The management of knowledge source must also be conducted with due care as the work environment is completely different from that of any other clinicians.

METHODS: The data were collected by direct interaction with residents of the department. Additional information was gathered by observation. The data were verified for validity.

RESULTS: This study was to bring out the benefits of proactive decisions that could further enhance the emergency department. But such decisions did not always result in positive responses and improved morale. When such decisions were retracted as it causes misalignment with the existing system. An academic emergency department was expected and physicians should enrich their knowledge about emergency medicine.

CONCLUSIONS: The problems faced by emergency department might be similar but the way in which one tackles the situation would be different. Decision making in this hospital may not be the best but it would've been the optimum one given the conditions available.

KEY WORDS: Academic emergency department; Administration; India; Case study; Hospital management; Developing nations; HR issues in emergency departments

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INTRODUCTION

The head of department (HOD) of emergency services in a private (for profit) hospital in New Delhi is not only managing routine activities in the department but also raising the bar to strategic levels of emergency medicine. While his colleagues abroad are trying to handle larger issues related to legislative agenda, health policy formulation and international policies for emergency medicine, he is being restricted to handling basic clinical, academic and administrative aspects of the emergency department. With his feet firmly planted on ground, he is aware that his department has to go through the cycle of evolution, one step at a time, as that is the only method in which he could sustain the development. The pin-up on

his notice board titled "world class change management" reminds him this by stating that the formula for success is the integration of vision, skills, motivation, resources and plan. He is also aware that his is the first medical specialty generated by public health demographic pressures thus there is need to first earn respect for emergency medicine among other specialties.^[1] The phone rang breaking his reverie. On the other end is one of the consultants stating that he is understaffed for the night shift as a colleague is on leave. Since the HOD has not been informed about this earlier, he has to not only arrange a back up at such short notice but also identify the source of this mismanagement as he needs to make sure that such situations does not arise in future.

Few years back

An emergency department is one that can have a great impact on the mind of any patient. The revenue that is brought in through this department is more implicit than direct. This is so since in case of an emergency, you just come to the nearest possible source of healthcare but its efficient handling lets you decide whether to stay and continue with the services they have to offer or not.^[2] Under the competent leadership of the new head of emergency services, it is believed that certain international standards could also be established in the department. Since emergency medicine is an untapped academic source in India, the niche for development could be further carved with his professional expertise.

His experience has led him to further realize the need for support from experienced professionals in the same field. This would help him in the process of organising an academic emergency department or one at the primary stage on par with the international standards. They provide the residents practical expertise through their 'bedside' training methods following the healthcare leadership competency model. However, retention of these professionals has proved to be more challenging as they move on to greener pastures. This may further highlight the need to develop the talent from within in a sustainable fashion.

Laying the foundation

Along with the development of a nation, there is a demographic shift which causes epidemiological shifts. Decreased mortality rate, increased life expectancy and increased urbanization result in a shift away from infectious diseases. This would lead to non-communicable chronic disorders such as heart disease, stroke, cancer and trauma. In India, there is an increased incidence of non-communicable and injury-related diseases, which accelerates the need for an emergency department that maintains international standards (Figure 1).

Furthermore, there is an increased number of residents taking up emergency medicine programmes in India. Although the course is restricted to a selected few organisations like Sri Ramachandra Medical Center (SRMC), Vinayaka Mission's Research Foundation (VMRF), Apollo Hospitals Educational and Research Foundation (AHERF), Christian Medical College (CMC), St. John's National Academy of Health Sciences and Post-Graduate Fellowship in Emergency Medicine (PGFEM). Since most (Figure 2) of the residents prefer PGFEM, it is the optimum choice with an application for Medical Council of India(MCI) as it has been recognized

MD emergency medicine.

Being at the primary stage of development, residents may chose to have a master degree in emergency medicine, a three-year training program under the aegis of a prestigious US-based University. The residents are provided with a strong foundation through didactic teaching sessions, bedside classroom training. They enjoy the professional culture at the hospital and is fully supported by clinical, pathological and radiological specialities integrated with advancements in information technology, leading to complete holistic care of patients.

Back to academics

The resource pool for future manpower in the emergency department is highly untapped and has great growth potential. But the teething stage can be tough on any programme whatever the benefits may be. The initial intent is to encourage existing resource to join the course but that does not suffice and recruitment has to be done from other sources. But the campaign gained momentum when in 2009 MCI recognized emergency medicine as a primary specialty. Soon the reputation of the course spread far and wide. Being a pioneer in the field provides added advantage and is able to provide qualitative and holistic

Figure 1. Causes of death: 2001-2003, Office of Registrar General, India.

Figure 2. Students in various emergency medicine programmes in India.^[3]

education to the residents. The increase in demand for the course has also helped in setting more stringent selection criteria. The present batch of residents is required to complete their basic life support (BLS) training before joining the programme. Furthermore, previous working experiences in emergency departments and related areas are mandatory for their selection.

Tightening up the selection criteria is not the only addition that has enhanced the programme. The academic framework offered to the residents has also undergone numerous fine tuning. The first few batches were completely tutored by experienced physicians and faculty from the foreign university. They were to manage attending classes and duty schedules. Evaluations were conducted on a regular basis to ensure the learning. Oral boards with simulated patient scenarios and bedside evaluations were part of the curriculum. Being a post graduate programme, it also called for more active involvement from the residents. Thus, residents were assigned presentations on academic topics, discussions of interesting cases they've experienced and also journals to update themselves with latest additions made in the emergency medicine field.

Achieving more together

A cost effective model was established by forming teams of residents in the programme (fellows) and a consultant. This group was expected to be guided by the experience and expertise of the consultant. The first and second year fellows were part of the team. Thus it was a judicious mix where the second year fellows were given an opportunity to develop their management skills as team leaders and the first year fellows given hands on experience with the evidence based medicine style of practice followed in the emergency department. In the initial stages there were issues of adaptability, but soon they were able to understand each other's pros and cons and thereby, turning the strength to the benefit of the team and ruling out the effect of the weakness.

The choice of the team leader made by the HOD was accepted as a norm and the decisions were respected. But since some of the first year fellows showed promise, they were also made team leaders. This made a shift in the power play, with issues being highlighted because of the lack of experience of the first year fellows. However, the HOD was soon able to prove the reason behind his choice as the fellows performed according to his expectation and helped in establishing a new performance driven work culture in the emergency department.^[4] Thus they formed themselves as a team which worked in sync and aimed

at effectively managing the emergency department than just based on their assigned roles. The teams were able to pitch in to fill in the gaps without remorse as they were able to imbibe the spirit of the emergency department and understand that their mission is to provide the best possible care for each and every patient.

Pushing the limits

With two batches running in the emergency department under PGFEM, there was a need to remove the training wheels. In the beginning, the hastiness of the decision was highly criticized and the fellows found themselves with a handicap. The pressure on them was increased and the fellows responded in the exact manner that was expected out of them. They were able to tap into their hidden potentials and raise the bar for themselves. This also paved way to a new style of emergency department management as now the complete controls were left with the fellows. Thus it gave them the autonomy and the opportunity to establish an emergency department that followed the international standards which were being taught to them.^[5]

The intent of such decisions was to take up the emergency department to strategic levels, thereby making them more receptive to the changes being made. This also aimed at increasing their participation levels and thus more support was given to the dynamism of the department. It has also been noticed that this helped the fellows to shoulder the increased responsibility delegation apart from patient care. Further skimming in the teams had occurred when the second year fellows had to move on to complete their curriculum requirements. Their absence from the emergency department was inevitable, so the rest of the fellows had to put their act together and manage the situation with lesser resources. At first, the fellows required back up but since they were involved in the decision of supporting the senior fellows achieve their course requirement, there was less resistance to the situation. The teams were able to manage with the minimum resources and still to maintain their productivity levels. This sudden skimming strategy also called for a more organized schedule for future batches. Thus rotations to other departments and hospitals would be conducted in a more planned fashion for the following batches.

Keeping the spirits high

The factors that keep the fellows motivated are unlike others as they are not employees of the hospital rather apprentices to a specialty. Thus efforts are taken to ensure that the fellows are equipped with state of the art technology equipment and also supported by BLS

and advanced cardiac life support (ACLS) trained staff. Classes are also scheduled in a manner that the fellows are able to attend them despite their duty. Faculty from the foreign university visit the hospital once a week every month to provide lessons on emergency medicine which help the residents to remain on par with their American counterparts. A conducive work environment was created in such a way that the fellows could be able to practice the learning offered in the classroom sessions. Efforts were also taken to ensure that the fellows would be able to attend the classes along with their duty.

Moreover, most of the fellows were either in budgeted positions or under stipend. Thus rewarding them in monetary terms with reference to their performance was not a practical option. Other mechanisms had to be adopted to maintain the satisfaction levels of the fellow.^[6] Initially, a suggestion was made to internally absorb the senior-most fellows as attending consultants at an increased pay package. But this was overruled in order to match the hierarchies of the other specialities. Therefore, step was taken to bring more clarity to their role of the senior-most fellows as "registrars". The stipend norms were also revised to reinforce the motivation levels and to also bring certain transparency in compensation at all levels.

Contributions to academics

Training and exposure to international experiences in emergency medicine avoids constantly "reinventing the wheel". As emergency medicine is a relatively young speciality, its contributions to the academic body is minimum and redundant. There is a need to contribute more to the field from practical experiences gained in the emergency department. For this the purpose, the course curriculum is enriched by the inclusion of mandatory research work. The fellows are to conduct a dissertation in an area of their interest and contribute to the academic body. They are further encouraged to conduct exploratory studies instead of restricting them to explanatory versions.

In favor of these exploratory studies, fellows are given opportunities to publish and present papers based on unique cases they've handled or come across in international conferences such as International Conference of Emergency Medicine (ICEM) and Asian Conference of Emergency Medicine (ACEM). This has the dual benefit of gaining recognition for the individual and the institute. In this manner, such exposures also help in building social relationships with experts in the field. The deserving candidates are also sponsored by the institute for the same as a form of encouragement. Thus, they promote the emergency medicine data generation in India and gain

global recognition. Although research is a curriculum requirement for MCI's equivalency status, the institute had encouraged such activities before the fellowship programme was upgraded to its present master status.

In order to gain the international experience, the curriculum includes a period of observer-ship at hospitals under the US university. Thus the residents gain the opportunity to work with the international community and upgrade their skills. This observer-ship creates awareness among the rest of the emergency medicine community regarding the capabilities of the residents. This would also provide an edge to the residents who are looking for placement opportunities abroad and it also gives the international community to absorb the fellows into their system.

More than a casualty

All emergency departments are thronged with patients with issues varying in their urgency. Some may opt for the service to avoid the crowding in the out patient department (OPD), some are recommended by the doctors in the OPD for injections and other medications, some come with the misconception that "special" treatment is provided only to emergency cases. Amidst all chaos, the genuine cases that require the attention of the emergency medicine physicians remain neglected. It may be due to trivial matters such as unavailability of beds since some patients are getting their daily dose of IV fluids. Such situations of underutilization of the resources undermine the sense of identity of an emergency medicine physician.

Yet the optimum utilization of the emergency department for offering emergency medicine services is not a simple task. Of which the initial step is to instil the confidence in the resident with regards to his or her capacity and potentials. The academic lessons provided in department management protocols and establishment of triage systems would reinforce the effort of the resident. As a result, there would be an improved rate of efficiency and effectiveness in the department. Furthermore, the residents who are placed on rotation in the network hospitals are now taking charge to establish similar management systems in them. Considerable growth of revenue could also be associated with this movement. A penal measure was also taken to restrict the patient flow by including a time-based fee for using the emergency department services and a special fee packages for the various treatment options. This has reinforced the department.

Work life balance

Stress is a major part of the work life of emergency

physicians. Since every two days there is a change in the duty schedule, they are affected physically, mentally and emotionally. The shifts are planned in such a way that a balance is maintained (Table 1) for the residents. But the stress and fatigue associated with it is inevitable.^[7] To further balance out the situation, ways to avoid burnout sessions are conducted by eminent psychologists. In this manner, the residents are guided to channel out stress in such a way that it doesn't affect their work or personal life.

Spreading the message

Taking the emergency department to the next stage begins with networking. Thus initially, the residents are sent in the second year to the various departments like the critical care and ICU which are associated with emergency medicine. This not only gives them an exposure to the other department's working mechanism but also sends a message across to the others regarding the capabilities of an emergency physician. This helps in achieving the goal "earn respect for emergency medicine" among the other specialities. Thus the residents play the role of ambassadors in the emergency department.

Taking a notch further up, these residents are further sent to other hospitals in the network. Thus the hospitals aim at these residents establishing a standard in emergency department. This exposure also provides them with the opportunity to hone their management skills with different groups with available resources. This method has helped the residents to adapt themselves to the environment and identify their potentials. It also is an eye opener for the residents when they venture on their own to join other healthcare systems. These rotations have also proved to be experiential as the residents take a different role to tutor those working with them and the staff to raise their standards and provide a more efficient and effective patient care. They also get to organize the departments

to follow the protocols and standards that have been set practiced worldwide but with local variations.

But networking with other hospitals (national) is needed in order to step into the secondary stage of development (Figure 3). Adhering to these requirements, the institute has developed a relationship with AIIMS which gives the residents trained under the programme to work in the AIIMS Trauma center. This facilitates the residents to stretch their capacities and work for the masses which require a complete turnover in the working pattern. This is where the residents align themselves to the mission to be a center for innovation and excellence in emergency medicine. The programme also creates an educational environment that promotes compassionate care and academic excellence.

The extra step

Before the completion of the course for the first batch, the institute was able to organize campus interviews for the graduating fellows of emergency medicine. One was for the post of Lead Medical Officer in the Norwegian

Figure 3. Stages of development in an emergency department.^[8]

Table 1. A portion of the roster in emergency department

Residents	1 (FRI)	2 (SAT)	3 (SUN)	4 (MON)	5 (TUE)	6 (WED)	7 (THU)	8 (FRI)	9 (SAT)
DR J (TL)	N	O	O	E	E	M	M	N	N
DR An	N	O	O	E	E	M	M	N	N
DR SAM	N	O	O	E	E	M	M	N	N
DR SAR (TL)	E	M	M	N	N	O	O	E	E
DR ABHI	E	M	M	N	N	O	O	L	L
DR AV	E	M	M	N	N	O	O	E	E
DR BL (TL)	M	N	N	O	O	E	E	M	M
DR A	O	N	N	O	O	E	E	M	M
DR N	M	N	N	O	O	E	E	M	M
DR PD (TL)	O	E	E	M	M	N	N	O	O
DR Ant	O	E	E	M	M	N	N	O	O
DR PR	O	E	E	M	M	N	N	O	O

E: 3pm-9pm; M: 9am-3pm; N: 9pm -9am; O: off days.

Cruise Line, one of the leading cruise companies, who have a minimum of 3000 guests on each of its ten cruises which operate in Bahamas, Alaska and Europe. Another successful campus was for training posts (ST3) under the Schools of Anaesthetics & ICM and Emergency Medicine of Northern Ireland Deanery (UK). This step to secure placements for fellows once they are in the final lap of their course empowers them and further emphasises to the rest of the medical community regarding the opportunity that awaits emergency physicians. The uniqueness of this initiative highlights the expansion of the domain as going this extra mile; the hospital would be able to establish its academic appeal across national boundaries. This strategy aims at the big picture in the long run which would facilitate the emergency medicine campaigns.

The bitter pill

Most private hospitals face the issues of "turf wars". This kind of possessiveness or "my patient" scenario is neither healthy for the patient nor the institute. There are many situations in which the fellow is faced with situations where a deserving patient is delayed services as it has been reserved for someone of a lesser priority medical problem. In simple words, when a patient who underwent a CABG a month ago visits the emergency department with diarrhoea, the cardiovascular surgeon insists that he is referred under him. This restricts the emergency department from providing the best possible care to all and goes against the medical ethics. In this case, a patient who needs the attention of the surgeon would not be provided the service till the matters are settled with the previous situation. This issue also occurs with reserving beds in the intensive care units for one's own patients with less priority situations, which leaves the residents with no choice but delay the admission or make alternate arrangements for other patients.

Emergency department is a department that is open to investigation by outsiders 24 hours/day since they are the first to contact the patients. The patients and their attendants can get a clear picture of the working of the department. They are also under the scrutiny of members of other departments, since emergency department has to take a participatory and involved approach to provide the patient with the right care. This situation referred as Fish Bowling in excess causes stress on the residents. Since there is no textbook solution to this situation each department tackles it with different methods. It can go from the usage of curtains to provide privacy, security to restrict the intrusions of attendants, insistence of seating the attendants with the ambulance driver and protocols for treatment and triage systems, which give the resident

autonomy to provide the initial required care. The emergency department has also provided the residents a session with a psychiatrist who referred to methods that make work interactions less stressful, resulting in better patient care. He highlighted to the fellows that although it is a daily routine for them, it is a traumatic experience to the patient and his/her attendants. This gave a new perspective to the residents, thus facilitating them to handle the situation in a more efficient manner.

An offshoot of this fish bowling is the advices given by people who do not understand emergency medicine. This includes the intrusions of specialists in other disciplines and other administrators. The emergency medicine residents first try to stabilize the patient and provide him or her with the basic care to life threatening causes. Since investigation reports take time, the resident would have to provide optimum care that fits with the situation. This can cause many wrinkled foreheads and the condemnation of members from the other departments who are not able to grasp the emergency situation in which the patient is brought. There could be cases in which conventional procedures such as waiting for reports to take the treatment decision would result in the death of the patients. The emergency department also faces the interference from specialists and departments with vested interference. The departments directly related to the emergency department consider it a power struggle and declare a territory war which may not be in the best interest of the patient. The source of this misunderstanding would be the limited exposure to other departments.

On a macro perspective, emergency medicine in India is highly under developed in comparison to its Asian counterparts. There is a need for government to accelerate support to this discipline as hitting the 1.2 billion population mark; the healthcare system would not be able to manage by maintaining status quo. Within the emergency department, we also notice that we are faster in adopting practices followed elsewhere but local variations are a necessity to meet our future requirements. The local variations also help in establishing more acceptability to this discipline. Furthermore, there is a need for vertical integration between the development of emergency medicine and emergency services. The institutes and the government have to work in tandem to make this alignment such that any advances made in emergency medicine through researches may be translated into services that assist in delivering better patient care.

Peeling through the layers

The speciality of emergency medicine is a multi-component system which includes emergency medicine,

emergency and critical care nursing, emergency medicine services and pre-hospital systems, trauma and other hospital departments, disaster systems, public health and injury prevention systems and recruitment, education, training, practice, integration, certification, continuous medical education and quality. It is also an integration of various activities that could be divided into two continuums (Figure 4). The continuums are based on clinical aspects and system aspects. Since this sort of integration occurs in the emergency department, the administration is more complicated as everything has to be aligned in the right manner.^[9] The ancillary staff must be able to give the right support to the residents and the administrative staff must be efficient enough to provide fast paced support in line with the situation. Similarly when patients are referred from other hospitals there needs to be system integration as medico legal cases would be involved and the law and order must be supportive to the cause.

The path ahead

The residents in the emergency department were busy with their research work. Most of them had been sent to participate in the emergency medicine conference to be held in Bangkok this year. Some of the residents had also been making their contribution to the academic body by publishing the unique cases they had experienced in the ED. This should be able to add on to the local variations that were required in the ED. The residents were supported by the institute to attend such international conferences and deserving ones are sponsored for the same.

Inroads have been laid to address the issue of inter-

Figure 4. Overall integration of the emergency department.^[10]

networking with other hospitals, and associations had been made with the AIIMS Trauma Center. The residents in the final year could play the role of an intern, thus gaining an orientation for the emergency care required for the masses. This networking relationship is expected to establish its relevance with this speciality and support from more institutes.

The HOD has given academic and administrative responsibilities to the residents by assigning them the title chief residents. This provides potential candidates with management acumen to enhance their skills. This is also a source of faculty development from internal sources. Their wish is to avoid "grandfathering" the speciality and to train younger generation as strategic partners to the speciality.

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