



ISSN: 2091-2749 (Print)
2091-2757 (Online)

Correspondence

Dr. Kabita Hada Batajoo
Department of Family Medicine
and Emergency Medicine,
KIST Medical College, Imadol,
Lalitpur, Nepal
Email: kabu_raj@yahoo.com

Peer Reviewers

Assist. Prof. Dr. Ashis Shrestha
Patan Hospital, PAHS

Prof. Dr. Jay N Shah
Patan Hospital, PAHS

Perception of rotating interns on emergency medicine posting of undergraduate curriculum and future career

Kabita Hada Batajoo,¹ Trishna Shrestha,² Sneha Pradhananga,² Shanta Manadhar³

¹Associate Professor, ²Lecturer, Department of Family Medicine and Emergency Medicine, KIST Medical College, Lalitpur, Nepal

³Consultant General Practitioner, CIWEC Clinic, Kathmandu, Nepal

ABSTRACT

Introductions: Competency in basic knowledge and skill of emergency care is the fundamental goal of all the medical graduates irrespective of their specialty. The aim of this study is to understand the view of young doctors regarding the importance of emergency medicine (EM) both during internship and undergraduate MBBS curriculum.

Methods: This was a descriptive cross sectional study conducted at emergency department, KIST Medical College, Lalitpur, Nepal, during 2016 to 2017. Interns were asked to fill up preformed questionnaires to explore the effectiveness of the posting and its necessity to integrate in undergraduate medical education.

Results: All the respondent medical interns accepted emergency medicine posting was fruitful. Ninety-six (62.3%) thought one month Emergency Department (ED) posting as appropriate. All the participants thought EM should be included in the undergraduate curriculum (UG). Majority believed it would be appropriate in third year (42%) and final year (42%). One hundred and thirteen (73.4%) wanted to pursue emergency medicine career however 41 (26.6%) were reluctant.

Conclusions: All the interns surveyed accepted emergency medicine to be fruitful and should be included in the undergraduate curriculum with one month emergency department posting, and two thirds wanted to pursue it as future career.

Keywords: emergency department posting, emergency medicine, perception of interns, undergraduate medical curriculum

INTRODUCTIONS

Emergency medicine (EM) is a broad based specialty and emergency department is the platform where undifferentiated patients with different level of acuity illness with varied clinical presentations of diverse pathology are encountered.^{1,2} Hence, clinical rotation in emergency will provide unique experience to young medical graduates with ample of opportunities to get exposed with varieties of life threatening conditions.³

Emergency medicine is one of the upcoming specialties in Nepal, its recognition and academic development is evolving gradually by the change in health care system.⁴ In western world, EM is well recognized subspecialty that is an integral part of undergraduate curriculum. The common fundamental exit goal of medical education is to make the graduates competent enough to recognize and manage common emergencies.⁵ This study will evaluate the perspective of interns on one month clinical posting in EM.

METHODS

This was a descriptive cross-sectional study conducted in emergency department of KIST medical college teaching hospital, Lalitpur, Nepal. Survey was conducted among the undergraduate medical school interns who came for mandatory one month emergency posting during two years period of 2016 to 2017. After taking consent, interns were asked to fill up preformed survey questionnaire. Confidentiality was assured. Questionnaire included gender and perception of amongst interns of EM posting on Likert scale. This included usefulness of the

posting, interest of young doctors to pursue their future career in EM, adequacy of the length of posting and its need to be included in undergraduate curriculum.

The study was conducted after the approval of institutional ethical review committee. Data analysis was done by SPSS version 21.

RESULTS

Hundred eighty interns voluntarily participated in the study out of which 154 (85%) completed questionnaires. Out of 154 interns, male were 83 (53.9%) and female 71 (46.1%). All the participants agreed the posting was useful. One hundred (64.9%) interns rated emergency department posting as above average to outstanding (Table 1). Responder found the emergency posting to be challenging 76 (49.4%) and interesting 78 (51.3%) respectively, and 11 (7.1%) consider it to be stressful.

Total of 113 (73.4%) wanted to pursue their future career in EM, rest did not due to various reasons, (Table 2). Male to female ratio for pursuing EM was 1:1.09. Ninety-four (61%) considered EM rewarding, 18 (11.6%) found it challenging (of which 17 (94.4%) wanted to make EM as their specialty choice)

Ninety-six (62.3%) participants considered one month mandatory emergency posting appropriate and 56 (36.4%) wanted to do for longer duration. All the participants agreed EM should be included in the undergraduate curriculum. Almost equal number of participants 42 (27.3%) thought it to be appropriate in 3rd year or final year respectively, (Table 3).

Table 1. Rating of emergency posting by interns (n=154)

Rating of Emergency Posting	N (%)
Unacceptable	0
Needs Improvement	6 (3.9%)
Average	48 (31.2%)
Above Average	81 (52.6%)
Outstanding	19 (12.3%)

Table 2. Acceptance to pursue future career in emergency medicine (EM) by rotating interns (n=154)

	Future career in EM and reason for acceptance or not, N (%)					Total N (%)	X ² , p
	1	2	3	4	5		
Yes	94 (100%)	17 (94.4%)	0 (0%)	1 (5.3%)	1 (16.7%)	113 (73.4%)	0.000
No	0 (0%)	1 (5.6%)	17 (100%)	18 (94.7%)	5 (83.3%)	41 (26.6%)	
Total	94	18	17	19	6	154	

*1 Lifesaving/variety of cases/immediate action/quick decision making/can deal with acute emergencies,

*2 Challenging, *3 Different subject of interest, *4 Stressful/Hectic, *5 Others

Table 3. Response of interns upon the year in which EM should be included in undergraduate curriculum

Year	1 st	2 nd	3 rd	3 rd , 4 th , 5 th	3 rd , 5 th	4 th	4 th , 5 th	5 th	Total
Frequency, n	2	4	42	4	10	33	17	42	154
Percent	1.3	2.6	27.3	2.6	6.5	21.4	11	27.3	100

DISCUSSIONS

In our study all interns surveyed agreed that EM should be included in the undergraduate curriculum. Majority (42%) proposed it to be on 3rd year and similar numbers agreed it to be on 5th year of curriculum when they will be exposed to clinical attachment. Although one of the model of undergraduate curriculum believed on progressive conceptual foundation of EM comprising throughout the course.⁵

The EM clerkship has been the integral part of undergraduate medical education.⁶ Thus, globally many of the medical schools have governed the mandatory 4 to 8 weeks emergency postings.⁷ There is limited study done regarding the ideal duration of training period in emergency during internship. Most of the medical institutions in South Asia have mandatory one month emergency posting.^{8,9} In this study, 62.3% respondents stated one month as an appropriate duration and 36.4% wanted it to be for a longer duration. Similarly, the study done by Mohammad Afzalimoghaddam et al. concluded that the longer duration of emergency posting has enhanced the learning skills and better teaching of emergencies.⁹ Worldwide male have predominance in EM.¹⁰ Other studies have hypothesized the underrepresentation of the women may be because they are inclined to specialties in which they are traditionally well represented.¹¹ Whereas, in

our study there is no significant difference between gender (M: F = 1.09:1) in selection of EM. There is a significant increase in EM future training path for medical students after the clinical attachment inspired by accessibility of different areas of EM such as disaster medicine, toxicology and emergency ultrasound and also wide opportunity for research due to varied acute clinical cases and interventional procedures.¹² Various studies had concluded that prior exposure, positive experience, motivating role model mentors are the most influencing factor.¹³ In our study the overall EM posting was evaluated average, above average, outstanding (31.2%, 52.6%, 12.3%) unlikely only 3.9% rated needs improvement. Nearly two third of the participants, 113 (73.4%) choose EM as their career option while 41 (26.6%) didn't opt for it; out of which 17 (11%) of participants were interested in different field of medicine; 19 (12.34%) were reluctant to pursue ahead EM career due to pressurized working environment and some were discouraged by unusual duty hour, lack of longitudinal continuity care of the patients. Similarly, Health education England and General Medical Council review has reported that EM is getting unpopular due to its pressurized and awkward duty hours.¹⁴ In Nepal institutions like BP Koirala Institute of Health sciences (BPKIHS)¹⁵ Dharan and Patan Academy of Health Sciences (PAHS)¹⁶ have incorporated EM in undergraduate curriculum under department of General Practice and EM. From

the findings of our study, the Emergency EM is important domain of the undergraduate education that needs to be integrated in undergraduate curriculum.

CONCLUSIONS

All the interns surveyed expressed emergency medicine (EM) to be fruitful, should be included in the undergraduate curriculum with one month emergency department (ED) posting, and two thirds wanted to pursue it as future career.

REFERENCES

1. Kuhn WF. Emergency medicine: a unique opportunity for medical students. *Academic Medicine*. 1999;74(7):755-6. Epub 1999/08/03. PubMed PMID: [10429582](https://pubmed.ncbi.nlm.nih.gov/10429582/).
2. Johnson GA, Pipas L, Newman-Palmer NB, Brown LH. The emergency medicine rotation: a unique experience for medical students. *The Journal of Emergency Medicine*. 2002;22(3):307-11. Epub 2002/04/05. DOI: [https://doi.org/10.1016/S0736-4679\(01\)00497-8](https://doi.org/10.1016/S0736-4679(01)00497-8). PubMed PMID: 11932105.
3. Bernard AW, Kman NE, Khandelwal S. Feedback in the emergency medicine clerkship. *Western Journal of Emergency Medicine*. 2011;12(4):537-42. Epub 2012/01/10. DOI: <https://doi.org/10.5811/westjem.2010.9.2014>. PubMed PMID: 22224156; PubMed Central PMCID: [PMC3236163](https://pubmed.ncbi.nlm.nih.gov/PMC/PMC3236163/).
4. Pandey NR. Emergency medicine in Nepal: present practice and direction for future. *International Journal of Emergency Medicine*. 2016;9(1):20. Epub 2016/07/16. DOI: <https://doi.org/10.1186/s12245-016-0118-3>. PubMed PMID: 27416937. PMCID: [PMC4947072](https://pubmed.ncbi.nlm.nih.gov/PMC/PMC4947072/).
5. Burdick WP, Jouriles NJ, D'Onofrio G, et al. Emergency medicine in undergraduate education. *Academic Emergency Medicine*. 1998;5(11):1105-10. Epub 1998/12/03. DOI: <https://doi.org/10.1111/j.1553-2712.1998.tb02671.x>. PubMed PMID: 9835475.
6. Manthey DE, Ander DS, Gordon DC, et al. Emergency medicine clerkship curriculum: an update and revision. *Academic Emergency Medicine*. 2010;17(6):638-43. Epub 2010/07/14. DOI: <https://doi.org/10.1111/j.1553-2712.2010.00750.x>. PubMed PMID: 20624144.
7. Manthey DE, Coates WC, Ander DS, et al. Report of the task force on national fourth year medical student emergency medicine curriculum guide. *Annals of Emergency Medicine*. 2006;47(3):e1-7. Epub 2006/02/24. DOI: <https://doi.org/10.1016/j.annemergmed.2005.09.002>. PubMed PMID: 16492483.
8. Syllabus MBBS at the AIIMS. 2nd ed. New Delhi: All India Institute of Medical Sciences; 2005. B-280; 2005. second: Available from: <https://www.aiims.edu/aiims/academic/aiims-syllabus/Syllabus%20-%20MBBS.pdf>.
9. Afzalimoghaddam M, Hoseinidavarani H, Hossein-Nejad H. Evaluating the impact of emergency medicine education on medical interns' knowledge scores. *European Journal of Emergency Medicine*. 2011;18(5):257-60. Epub 2011/03/11. DOI: [10.1097/MEJ.0b013e328344fe05](https://pubmed.ncbi.nlm.nih.gov/10.1097/MEJ.0b013e328344fe05/). PubMed PMID: 21389859.
10. Brotherton SE, Etzel SI. Graduate medical education, 2008-2009. *JAMA*. 2009;302(12):1357-72. Epub 2009/09/24. DOI: [10.1001/jama.2009.1221](https://pubmed.ncbi.nlm.nih.gov/10.1001/jama.2009.1221/). PubMed PMID: 19773575.
11. Lambert EM, Holmboe ES. The relationship between specialty choice and gender of U.S. medical students, 1990-2003. *Academic medicine*. 2005;80(9):797-802. Epub 2005/08/27. PubMed PMID: [16123456](https://pubmed.ncbi.nlm.nih.gov/16123456/).
12. Celenza A, Bharath J, Scop J. Improving the attractiveness of an emergency medicine career to medical students: an exploratory study. *Emergency Medicine Australasia*. 2012;24(6):625-33. Epub 2012/12/12. DOI: <https://doi.org/10.1111/j.1742-6723.2012.01607.x> PubMed PMID: 23216723.
13. Macy J, Jr. The role of emergency medicine in the future of American medical care. *Annals of Emergency Medicine*. 1995;25(2):230-3. Epub 1995/02/01. DOI: [https://doi.org/10.1016/S0196-0644\(95\)70329-2](https://doi.org/10.1016/S0196-0644(95)70329-2) PubMed PMID: 7832352.
14. James F, Gerrard F. Emergency medicine: what keeps me, what might lose me? a narrative study of consultant views in Wales. *Emergency Medicine Journal*. 2017;34(7):436-40. Epub 2017/03/31. DOI: <http://dx.doi.org/10.1136/emermed-2016-205833>. PubMed PMID: 28356388.
15. BP Koirala Institute of Health sciences (BPKIHS), Dharan. <http://bпкиhs.edu/>
16. Patan Academy of Health Sciences (PAHS), Lalitpur. <http://www.pahs.edu.np/>