

PERCEPTIONS OF UNDERGRADUATE STUDENTS ABOUT PEER MENTORING

Syed Azhar Ul Hassan Shah, Usman Mahboob*, Hidayat Ullah**

National University of Medical Sciences (NUMS) Rawalpindi Pakistan, *Khyber Medical University, Peshawar Pakistan, **Yusra Medical & Dental College, Rawalpindi, Pakistan

ABSTRACT

Objective: To explore the perceptions of undergraduate medical students, about mentoring from their senior peers.

Study Design: Qualitative study.

Place and Duration of Study: Army Medical College, Rawalpindi, from Jun to Dec 2016.

Methodology: Fifty medical students, from all 5 academic years were selected through purposive sampling for Focus Group Discussion. The discussions were audio recorded, transcribed and analyzed for pattern generation, through primary coding, with the help of Nvivo software.

Results: Common words, phrases or sentences, used by the participants and depicting concepts, were identified and abbreviated. Based on the comments used by the participants, a total of 17 first cycle codes, 6 categories 2 themes were identified; using QRS Nvivo. Participants were unanimous in highlighting the stressful nature of medical education, expressing the need of formal student support programs at the college to mitigate the stress and to improve their academic performance. Military training and lack of proper guidance, and at times misguidance, were considered to be the major contributors in perpetuating the multipronged stress, although most of the participants favored continuation of military training.

Conclusion: Stress was pervasive in the students, especially in their initial weeks and month, the perception of its severity being dependent on host of factors. To produce a relaxed, empathetic, competent and confident doctor the institute needs to provide congenial educational environment during their undergraduate training. Certain administrative measures can be beneficial for improving peer support to help junior peers in their professional development.

Keywords: Mentoring, Peer mentoring, Peer support, Psychological stress, Students' perceptions.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Undergraduate medical education is known to be stressful endeavor¹⁻⁴ where the brilliant and motivated students are exposed to multiple types of difficulties related to academics, emotions and adjustment. Without proper guidance and support, these stresses are likely to take the toll in the form of poor academic performance, low self-esteem, maladaptive patterns of behaviors and even psychiatric disorders like anxiety and depression⁵.

Proper guidance and support of the new entrants is important in promoting psychological wellbeing and academic performance. In this

connection, mentoring by the faculty plays an important role⁶. In view of time constraints and number of students; as well as the reluctance of students to approach the faculty, makes such arrangements in medical colleges rather a difficult proposition⁷.

In addition, since students feel comfortable in interacting with their senior peers because of their social and cognitive congruence⁸ and find their guidance more practicable due to their own recent experiences, arrangements of a modified peer mentoring program can prove to be beneficial both for the mentors as well as the novices⁹.

Dearth of literature about mentoring in military medical institutes, as well as the peculiar setting of Company System, justifies a qualitative research to explore the perception of under-

Correspondence: Dr Syed Azhar Ul Hassan Shah, National University of Medical Sciences, University, Rawalpindi Pakistan

Email: azhars_chh@hotmail.com

Received: 02 Aug 2018; revised received: 13 Oct 2018; accepted: 14 Dec 2018

graduate medical students about mentoring at Army Medical College. On the basis of outcome and recommendations of this study, authorities concerned can take measures to improve the educational environment and help in handling the stress by the students.

METHODOLOGY

This qualitative study was carried out from June to December 2016, at Army Medical College, for which approval of Ethical Review Committee of Army Medical College, as well as administration, was taken. Ten medical students (7 male & 3 female) from each class were included in study, based on their proportional representation, in accordance with the inclusion criteria (only hostelite students), totaling 50 participants.

Maximum variation purposive sampling technique¹⁰ was used in this study. Result of last professional exam of each 2nd, 3rd, 4th and final year, and result of F.Sc exam of 1st year was arranged in descending order. Seven male students, two each from top and bottom values of the list and three students from the center of the list were selected from each class. Similarly, three female students; one each from top, bottom and at central value of the list were selected from each class.

All participants were briefed about the nature and purpose of study. They were assured about the confidentiality of their opinions and were informed that participation in this study was purely on voluntary basis and they were free to opt out of it. Their written consent was obtained before the Focus Group Discussions.

Guided by a questionnaire, validated through opinion of experts, a total of nine FGDs were conducted, including five groups of male students (consisting of seven participants in each group) and three groups of female students (consisting of three participants in each group). Due to schedule and coordination constraints one group of female students from 2 academic years (3rd & 4th year), consisted of six participants. The group discussion was audio recorded on personal mobile phone. The recording was later uploaded

on personal laptop and transcribed verbally in English, hiding the identities of the participants. Questions for FGD were designed to find out whether peer mentoring is taking place; its pervasiveness and how it affects the students; emotionally, socially and academically. As a logical sequence, the study also wanted to gain an insight into the students' perceptions about methods to improve students' support at Army Medical College.

Common words, phrases or sentences, used by the participants and depicting concepts, were identified and abbreviated. A total of 17 first cycle codes, based on the comments used by the participants, were identified; Using QRS Nvivo.

On the basis of conceptual congruence, axial coding, categorization and major pattern generation was done. Thematic analysis, revealed following areas of concern:

RESULTS

Available Student Support:- Amongst the available support systems, the participants talked about the peer academic and psychological support beside the support in helping them in adjusting to military lifestyle. Although, participants acknowledged the academic and psychological support they receive from their faculty, however, guidance in academics is considered more realistic and beneficial from the senior peers. A representative statement is as follows:

"Then they used to guide us in our studies by marking our subjects and suggesting us from where to study. It may not have been very good guidance, but now when I reflect; at least they tried to help us according to their mental level at that time. And then, if we go to them for help, they didn't refuse though they were themselves hard pressed of the time for studies". (year 4 Male student).

General opinion, however, was divided about the application of word 'mentoring' for the support the participants received from their senior peers. Most considered it, at the most, 'guidance', if not mere instructions or orders;

while others considered the peer support akin to formal mentoring, where senior appointment holders are assigned to guide the new entrants. A representative statement from one of the FGD is as follows:

“..... our seniors train us and guide us in matters of discipline, manners and studies in the beginning...they properly groom us and I feel we improved a lot with their help. But according to

processes in the college. Despite being a medical institute, they considered that college gave more importance to the military training as compared to the academics, especially during first few months. They feel college should adopt a balanced approach towards the academics and military training. However, interestingly, majority of the participants wanted military training to continue. Two representative

Table: Detailed first cycle coding leading to categories and themes.

S. No.	First Cycle Codes, Categories & Patterns	Abbr.	References from Focus Groups (FG)									Total Ref
			1	2	3	4	5	6	7	8	9	
Available Student Support (ASS)												
a. Peer Support (PS)												
1	Academic Support	AS	4	9	3	4	3	4	5	4	1	37
2	Psychological Support	PsyS	4	2	9	1	2	3	1	2	1	25
3	Support in adjustment to Military Lifestyle	MLS	9	-	1	-	1	1	1	-	-	13
b. Issue of Mentoring & Factors Influencing Peer Support (MIF)												
1	Mentoring Versus Peer Support	MVS	10	5	5	4	8	9	7	4	2	54
2	Influence of demography in Peer Support	DF	6	3	6	4	4	5	2	3	4	37
3	Role of other Interests in Peer Mentoring	SHI	-	1	3	2	4	1	5	3	1	20
c. Support from Other Sources (SOS)												
1	Faculty Support	FS	2	3	2	7	1	-	-	1	-	16
2	Administrative Support	ASup	-	-	-	2	-	-	-	-	-	2
Suggestions to Improve Peer Support (ISS)												
a. Setting Direction & Implementation (SD)												
1	Balancing Military Training & Academics	MTA	1	-	2	2	6	5	3	5	-	24
b. General Administrative Measures (GA)												
1	Military Training	MT	3	3	3	3	4	-	-	4	2	22
2	Selecting Appointments	Appt	2	-	-	-	-	1	3	3	-	9
3	Adherence to Timetable	TT	3	-	-	1	-	1	-	3	-	8
4	Early Interaction with seniors	EI	-	2	2	1	2	-	-	-	-	7
c. Student Guidance (SG)												
1	Training of Senior Students	TS	3	4	-	1	-	2	3	6	1	20
2	General Guidance	GG	1	1	-	2	1	3	4	3	3	18
3	Academic Guidance	AG	5	-	-	1	-	-	4	3	1	14
4	Counseling	Con	-	-	-	1	-	6	2	1	3	13

definition it may not be mentoring, we have no say in this. We get orders and instructions mostly which we have to obey. (Year 1 Female student).

Suggestions for improvement of student support:- There was consensus amongst the participants about the requirement of student support system in the college. However, almost all the participants expressed their perception of a mal-alignment of stated mission and the

statements from FGDs are as follows:

“Strict discipline is okay, but after all we are to here to become doctors. So there should be some balance. In such stressful environment how can one focus on their studies which are also different from F.Sc”. (Year 2 Female student).

“I think that, since we are here in a medical school so, our first priority should be studies. Training is important but it shouldn't over

shadow our studies. So that's it". (Year 3 Female student).

Instead of providing some sound support system and welcoming educational environment, it is perceived that, for the sake of discipline, the educational environment is made hostile towards new entrants, and for the sake of making them psychologically strong, they are left to themselves to live it out. A representative statement from one of the FGD is as follows:

"Strict discipline is okay, but after all we are to here to become doctors. So there should be some balance. In such stressful environment how

them better. The initial days, especially, are full of stress including issues about hostel and studies, so this awareness will give them some sort of relief". (Year 4 Male student) (table & figure).

DISCUSSION

In this study, all the participants perceived medical education as stressful, especially during their early months. They acknowledged the support they received from their senior peers, both in academics as well as psychologically. However, perception of this support was more of a formal guidance instead of mentoring.

Almost all the participants perceived the

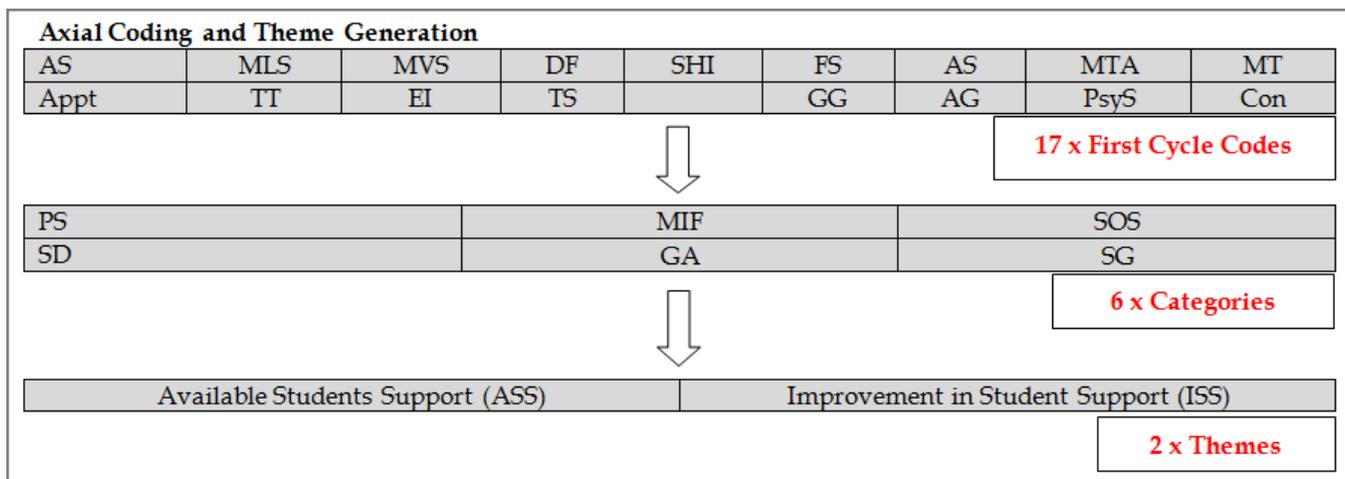


Figure: First Cycle coding leading to categories and themes.

can one focus on their studies which are also different from F.Sc". (Year 2 Female student)

Almost all the students perceived lack of guidance, both, guidance about general routines as well as the academic guidance, as the main factor causing stress and academic difficulty in the initial days. Participants perceive that certain administrative measures can be beneficial for improving peer support at Army Medical College. In addition, counseling sessions for the new entrants and training the senior students about the importance of guidance and mentoring have also been discussed.

"..... I feel an awareness campaign for the seniors may be helpful in reminding them of the stresses of juniors and the way they can guide

requirement of student support system through deeper involvement of administration in the matters of balancing the requirement of military training and academics, providing early and in-detail guidance in the matters of the college and hostel routines, establishing students' counseling cell and selection of the Company appointments and their training in handling the new comers.

It is crucial for medical educators to understand the prevalence and causes of student distress, potential adverse personal and professional consequences, and institutional factors that can, positively or negatively, influence student health^{10,11}. As with other studies, Jenny Ferth, in her research at three British universities compared the levels of stress in undergraduate medical

students and general population, and found the level of stress to be considerably higher in the students¹²⁻¹⁶.

New routines of hostelite students with additional responsibilities, after a protected environment at home with parental support, were considered stressful, especially by the female students¹⁷⁻²⁰.

Swenson *et al*, suggested that the nature of support and opportunities for sharing and learning through peer interactions is important for personal and academic development²¹. However, this possible students' support was found missing in this study due to the restriction on interaction with their seniors. In the absence of 'well planned' support system, issues of early adjustment in new environment appear natural, which perpetuate other stresses.

Unique characteristic of military training is to prepare people to show adequate resilience, and remain healthy, despite high stress levels²². Therefore, support system for freshmen in a military institute appears to be a paradoxical concept. It is probably this reason that very few studies have been conducted in this field.

Undergraduate medical education in a military medical institute, thus, raises a question of selection of paradigm. On the one hand, we want these medical students to be trained as competent, humane, ethical minded and caring doctors with empathy for the patients; and on the other hand we train them to be psychologically robust combat doctors. However, since Army Medical College requires a balanced academic schedules with other military lifestyle demands, physical and psychological fitness and wellness, it is the matter of degree of focus of college administration; and instead of the question of 'military training OR medical education, it should be 'military training AND medical education'.

Formal mentoring (in its true form) or student support programs are not available at the college and most of the guidance is through the appointment holders of each Company. These

students are, apparently, neither selected through any rigor nor given any training in handling the new students. Chances of informal mentoring at the initial stage of the new class, when they need it the most, are even less, though might start at a later stage when they students start knowing each other.

Swenson *et al*, have elaborated upon the role of strong peer network in enhancing academic performance and providing psychosocial support, in which peers are considered as a resource for academic²¹. Lundberg *et al* have argued that opportunities for sharing and learning through peer interactions is important for personal and academic development²³.

Senior medical students are more likely to easily relate to challenges being faced by junior students, and "peer mentoring programs", designed to promote mentorship of junior students by their senior colleagues are expected to lower student stress²⁴.

LIMITATION OF STUDY

Limitation of this study was the peculiar setting of military environment and 'company system' at Army Medical College which leads to strong bondage and comradeship amongst the students; making the findings contextual. In addition, researcher being a medical graduate of Army Medical College, some phenomenon like military training and discipline might have been perceived with less emotional intensity.

RECOMMENDATION

For this purpose, certain administrative measures, like administration's greater involvement in decision making about assigning the appointments among the seniors and their training in handling and guiding the new entrants can be beneficial for improving peer support. In addition, encouragement for interaction with senior peers at an early stage, implementation of the concept of counselling cell, counselling sessions and group discussion of the fresh students for their guidance in issues like time and stress management, relaxation exercises, positive coping skills, available student support

system and concepts like peer mentoring, needs to be started. Finally, a structured peer mentoring program is required to be introduced in the college. Rewards in the form of recognition/appreciation of senior peers by college authorities, as well as fresh students, can be an effective motivation for them.

CONCLUSION

Stress was pervasive in the medical students studying in a military medical college, especially in their initial weeks and months. Unfortunately, this is the time when their interaction with their senior peers is restricted to the designated few appointment holders, thus wasting a huge academic and psychological resource. To produce a relaxed, empathetic, competent and confident doctor the institute needs to provide congenial and friendly educational environment during their undergraduate training.

ACKNOWLEDGEMENT

Authors thank all the undergraduate students of Army Medical College, who participated in this study, for their valuable time.

CONFLICT OF INTEREST

This study has no conflicts of interests to be declared by any author.

REFERENCES

- Rosal MC, Ockene IS, Ockene JK, Barrett SV, Ma Y, Hebert JR. A longitudinal study of students' depression at one medical school. *Acad Med* 1997; 72(6): 542-6.
- Singh G, Hankins M, Weinman JA. Does medical school cause health anxiety and worry in medical students? *Med Educ* 2004; 38(5): 479-81.
- Styles W. Stress in undergraduate medical education: 'the mask of relaxed brilliance'. *Br J Gen Pract* 1993; 43(367): 46-47.
- Stewart SM, Lam T, Betson C, Wong C. A prospective analysis of stress and academic performance in the first two years of medical school. *Medical Education-Oxford* 1999; 33(4): 243-50.
- Ko S, Kua E, Fones C. Stress and the undergraduates. *Singapore Med J* 1999; 40(10): 627-30.
- Levy BD, Katz JT, Wolf MA, Sillman JS, Handin RI, Dzau VJ. An initiative in mentoring to promote residents' and faculty members' careers. *Acad Med* 2004; 79(9): 845-50.
- Bhatia A, Singh N, Dhaliwal U. Mentoring for first year medical students: humanising medical education. *Indian J Med Ethics* 2013; 10(10): 100-3.
- Lockspeiser TM, O'Sullivan P, Teherani A, Muller J. Understanding the experience of being taught by peers: the value of social and cognitive congruence. *Advances Health Sci Edu* 2008; 13(3): 361-72.
- Awang MM, Kuty FM, Ahmad AR. Perceived social support and well being: First-year student experience in university. *Intl Edu Stud* 2014; 7(13): 261-64.
- Coyne IT. Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *J Adv Nurs* 1997; 26(3): 623-30.
- Dyrbye LN, Thomas MR, Shanafelt TD. Medical student distress: causes, consequences, and proposed solutions. *Mayo Clin Proc*; 2005: Elsevier.
- Firth J. Levels and sources of stress in medical students. *Br Med J (Clin Res Ed)*. 1986; 292(6529): 1177-80.
- Miller P, Surtees P. Psychological symptoms and their course in first-year medical students as assessed by the Interval General Health Questionnaire (I-GHQ). *Br J Psychiatry* 1991; 159(2): 199-207.
- Guthrie E, Campbell M, Black D, Creed F, Bagalkote H, Shaw C. Psychological stress and burnout in medical students: A five-year prospective longitudinal study. *J R Soc Med* 1998; 91(5): 237-43.
- Thangaraj S, D'souza L. Prevalence of stress levels among first year medical undergraduate students. *Intl J Inter disciplinary Multidisciplinary Studies* 2014; 1(1): 176-81.
- Supe A. A study of stress in medical students at Seth GS Medical College. *J Postgrad Med* 1998; 44(1): 1-5.
- Saipanish R. Stress among medical students in a Thai medical school. *Med Teach* 2003; 25(5): 502-6.
- Sherina M, Rampal L, Kaneson N. Psychological stress among undergraduate medical students. *Med J Malaysia* 2004; 59(2): 207-11.
- Shaikh BT, Kahloon A, Kazmi M, Khalid H, Nawaz K, Khan N, et al. Students, stress and coping strategies: A case of Pakistani medical school. *Edu Health Abingdon Carfax Publishing Limited* 2004; 17(1): 346-53.
- Gregerman SR, Lerner JS, von Hippel W, Jonides J, Nagda BA. Undergraduate student-faculty research partnerships affect student retention. *Review Higher Edu* 1998; 22(1): 55-72.
- Swenson LM, Nordstrom A, Hiester M. The role of peer relationships in adjustment to college. *J Coll Student Develop* 2008; 49(6): 551-67.
- Baker BT, Hocevar SP, Johnson WB. The Prevalence and Nature of Service Academy Mentoring: A Study of Navy Midshipmen. *Military Psychol* 2003; 15(4): 273.
- Lundberg CA. The influence of time-limitations, faculty, and peer relationships on adult student learning: A causal model. *J Higher Edu* 2003; 665-88.
- Mouret G. Stress in a graduate medical degree. *Medical J Australia* 2002; 177: S10-15.