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RESEARCH ARTICLE

MENTORING OF EMERGENCY RESIDENTS A DESIRED NECESSARY OR IMPOSITION

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Abstract

Introduction: Mentoring process receives a lot of attention from the researchers, providing multiple definitions on what exactly are mentor, mentee and mentoring process.Mentoring is a vital component of education, personal growth, and career development in every profession.

Background: As mentoring is an essential part of Emergency Residency program, as it is very much necessary for carrier and academic development. But little has been written about mentoring in emergency medicine

Objective: To find out Benefits of mentor mentee program.

Aim Of The Study-

1. To study the benefits of mentor mentee program for residents and practice of mentoring in tertiary care hospital in India.
2. To know the students perception on mentoring relationship in an organization.
3. To understand the factors effecting mentoring relationship.

Limitations Of The Study: In spite of every sincere effort my study has lacunae.The notable short comings of this study are:

1. The sample size was small. Only 200 cases are not sufficient for this kind of study.
2. As data collection was done via survey monkey there was a delay and some of them did not response.
3. The study population is being tested upon a confined set of questionnaire and it may not cover the entire range of questions.

Materials And Method: A descriptive and observational, multicentric, hospital-based, questionnaire based study was conducted. 200 residents of emergency medicine evaluating the effect of mentoring on career choices and academic advancement. For statistical analysis data wereentered into a Microsoft excel spreadsheet and then analyzed by SPSS 27.0.

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Ethics & Scientific Committee Approval: Clinical research and ethics committee Peerless hospital Hospitex & Research center approval date 27th December 2018. Approval letter attached.

Result And Discussion: Our study found that maximum emergency residents think development of clinical skills via mentoring was helpful and very helpful for developing administrative skills. Most of the emergency residents think mentoring was very helpful platform for Academic development and helpful for Research or Publication. But in our study emergency residents think mentoring was not helpful for psychological support.

Conclusion: The mentor–mentee relationship provides mutual benefit to both participants. We suggested that mentoring increases the likelihood of successful clinical skills and Academic development. It was also found that mentoring was also helpful to develop administrative skills and Research or Publication but it was not that much helpful for psychological support of the student. As emergency medicine is stressful challenging psychological support is very much necessary .We suggest that attention should be taken towards psychological support. Keys to success is commitment to the mentor-mentee relationship, an awareness of both responsibilities and avoidance of pitfalls.

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Introduction:-

"Mentoring is a brain to pick, an ear to listen, and a push in the right direction."-John Crosby,

Mentoring is a vital component of Education, personal growth, carrier development in every profession. So what exactly is mentor, mentee and mentoring process?. As described, mentoring includes the mentee and mentor. Classically, the mentor is the individual with greater experience and knowledge, as well as a more senior position. This can occur at any level including medical student and resident or staff, junior faculty and senior faculty. Most of us have experienced mentoring at a given point of time during our academic or student life .In short mentoring is one of the ways used to transfer knowledge. One major goal of the mentoring relationship is matching of a junior colleague with a more experience by helping him to obtain with the skills and knowledge from a experienced senior colleague. The mentor's main goal is to assist the mentee along the road for future success in life, obtaining his/her goals. However, success can be defined differently, depending on the individual, and the mentor and mentee may differ in their definitions of success. Mentoring has multiple benefits, including improved productivity, and most importantly, career satisfaction and development.Physicians with mentors are more confident in their abilities. study suggests physicians with a mentor receive a higher salary.Professional societies have established the importance of mentoring, many creating formal programs for mentoring with resources. Who benefits?The relationship primarily benefits the mentee. As discussed, mentees demonstrate greater satisfaction, faster promotion, and more academic productivity in the literature.Other benefits include professional safety, confidence, project opportunities, greater understanding of medical roles, feedback, funding, and more relationships. Mentors also benefit, though these benefits may not occur as quickly. Mentors can assist in the development of a colleague, are exposed to new ideas, and have an opportunity to share their own values. Potential Topics for mentoring- Mentoring encompasses a wide range of topics. Topics can be separated into three fields: training, personal and professional, and future career, which overlap. Training issues such as mentee progress in his/her residency or career, rotation selection, clinical efficiency, mentee preparation for lectures or presentations, medical knowledge, discussion of cases (interesting, successful, difficult, or challenging), and tests are the major components of this field

There is much published literature regarding the importance of mentoring in faculty development.Mentoring for medical students and residents has always been strongly encouraged. It makes sense that the presence of mentors at probably one of the most important transition points in a physician's career would be highly desirable. Although mentoring is a well-recognized topic in academic medicine, relatively little has been written about mentoring in emergency medicine. Although the reasons for this are numerous, I would argue that in the Emergency department mentors needed most where a resident skills and knowledge gets tested every minute and have to maintain a very less margins of errors at emergency. Perhaps as residents enter practice we need to be more explicit that there will be

individuals who are willing to mentor them, to help them to continue to develop their clinical courage to maintain practice in these environments.

Our objectives of this paper were .First we wanted to conduct a review of literature on mentoring in EM. Second, based on this review we wish to know the students perception on mentoring relationship in an organization and lastly, the factors effecting mentoring relationship.

Aim of the Study:

1. To study the trends and practices of mentoring in tertiary care hospital in India.
2. To know the students perception on mentoring relationship in an organization
3. To understand the factors effecting mentoring relationship

Review of Literature:

Mentoring is a vital component of education, personal growth, and career development in every profession. In emergency medicine, mentoring is beneficial, for career development, job satisfaction, and goal achievement.Mentoring is defined by a trusted and experienced advisor (the mentor) who has a direct interest in the development and education of another individual (the mentee).Importantly, mentoring is defined by intentional interaction, with the primary goal of mentee development. The mentee seeks to receive guidance and wisdom, commonly in a confidential, protective, and supportive environment, from the mentor who actively sets aside time and energy and remains flexible.

This relationship can be short or long, structured or loose. It does not need to be continuous, and contact may be reestablished after breaks. It can occur with a variety of levels. Importantly, both the mentor and mentee gain from this relationship, though at first the mentee seems to benefit the most.

Yorkshire accident and emergency mentoring scheme

Mentoring was introduced to the accident and emergency medicine trainees of this region in 1997. The regional coordinator sends out names of volunteer mentors (15 of them) to the prospective mentees who then choose a mentor that they are comfortable with and feel will respect their confidentiality. They remain together for the duration of the mentee's training. As capacity is always a problem, mentees are advised to nominate a second choice, as their first choice may not be accommodated. Mentors are encouraged to attend the regular semiformal trainee meetings giving them an opportunity to assess one another. A survey was carried out in May 1999 to assess the impact, if any, that the mentoring had on their training and determine if there was any enthusiasm for the mentoring scheme. All 28 specialist registrar trainees in emergency medicine were sent a questionnaire of nine questions (see appendix) either by post or in person. All were guaranteed anonymity. Twenty five replied (89%), of which 19 were male and six were female; four were from an ethnic minority. This good response was matched by very good completion of the questionnaires. All 25 respondents had mentors and were familiar with the concept of mentoring. Seventeen selected their mentors while eight were allocated mentors. Reasons were not given in the reply sheets. All of the respondents met at least two to three times a year with their mentors. Seventeen of these met more than four times a year with their mentors. When asked if they found appraisals and assessments intimidating, five said yes and 18 said no. Four of the five who replied yes were from an ethnic minority and one was a white female. The most common reason advanced was, "Assessments were confrontational like examinations and too formal". When asked if mentoring helped their preparation for appraisals and assessment, 18 said yes, five said no. Two did not answer as they were in year 1 and had not yet had an assessment. Those who replied no to the question were in years 4 and 5. They felt that the mentoring scheme had no impact on their training. Ethnic minority and female trainees were most enthusiastic and felt that mentoring was very helpful in preparing them for appraisals and assessments. These findings mirror the reported conclusions of the investigations into the outcomes of the doctors development and mentoring network in the Northern and Yorkshire region of the NHS, carried out by Dr Mary Connor. It showed that mentoring could be of particular value to marginalised groups such as ethnic minorities and women in medicine.

Yeung M et al (2010) found that a mentor is a person who takes a special interest in the professional development of a junior colleague and provides guidance and support. Mentoring can be beneficial for students, residents, junior colleagues and researchers and can be very rewarding for the physician who provides this guidance. Although mentoring is a well-recognized topic in academic medicine, relatively little has been written about mentoring in emergency medicine (EM). Consequently, we conducted a literature review on mentoring in EM and present our

findings in this paper. We discuss different models of mentoring, factors that foster the development of strong mentorship programs,the responsibilities of mentors and mentees, and issues specificto mentorship of female, minority and research physicians. We also present several case scenarios as a basis for recommendations for teachers and learners in EM.

Welch JL et al (2016) found that Mentoring in academia is considered a fundamental element of career choice, satisfaction, and productivity. While there is an expectation that trainees and junior faculty will have a mentor, there is no standard practice for training or establishing mentoring relationships. This mentoring workshop is designed to help leaders in academic medicine train mentees. This workshop is built around the fundamental belief that training the mentee to be proactive, take ownership, and drive the relationship will not only jump-start the mentoring process but also cultivate a more sustainable mentoring relationship. The materials for this workshop include instructor and participant resources to facilitate self-reflection and group discussion. Tools include a mentee needs self-assessment and a mentoring network map. Implementation of the workshop was successfully carried out in a residency program with 21 interns in their first year of training. Participants believed the workshop was appropriate for their needs and provided useful knowledge and tools to enhance their mentoring relationships. This workshop is the first session in a mentoring training series designed to provide ongoing mentoring training, resources, and tools to encourage both the mentor and the mentee to cultivate a productive relationship.

Garmel GM et al (2004) found that Mentoring is an important aspect of career development for medical students, residents, and junior faculty. It is vital to the professional growth and maturation of individuals early in each phase of their careers. Additionally, mentoring has a critical role throughout all career stages, because the mentor–mentee relationship provides mutual benefit to both participants. This article will describe the role of the mentor; suggest ways to increase the likelihood of successful.

Welch J et al (2017) Mentoring is considered a fundamental component of career success and satisfaction in academic medicine. However, there is no national standard for faculty mentoring in academic emergency medicine (EM) and a paucity of literature on the subject. The objective was to conduct a descriptive study of faculty mentoring programs and practices in academic departments of EM. An electronic survey instrument was sent to 135 department chairs of EM in the United States. The survey queried faculty demographics, mentoring practices, structure, training, expectations, and outcome measures. Chi-square and Wilcoxon rank-sum tests were used to compare metrics of mentoring effectiveness (i.e., number of publications and National Institutes of Health [NIH] funding) across mentoring variables of interest. Thirty-nine of 135 departments completed the survey, with a heterogeneous mix of faculty classifications. While only 43.6% of departments had formal mentoring programs, many augmented faculty mentoring with project or skills-based mentoring (66.7%), peer mentoring (53.8%), and mentoring committees (18%). Although the majority of departments expected faculty to participate in mentoring relationships, only half offered some form of mentoring training. The mean number of faculty publications per department per year was 52.8, and 11 departments fell within the top 35 NIH-funded EM departments. There was an association between higher levels of perceived mentoring success and both higher NIH funding ($p = 0.022$) and higher departmental publications rates ($p = 0.022$). In addition, higher NIH funding was associated with mentoring relationships that were assigned (80%), self-identified (20%), or mixed (22%; $p = 0.026$). Our findings help to characterize the variability of faculty mentoring in EM, identify opportunities for improvement, and underscore the need to learn from other successful mentoring programs. This study can serve as a basis to share mentoring practices and stimulate conversation around strategies to improve faculty mentoring in EM.

Rekha KN et al (2019) the primary objective of the present study is to understand mentoring relationships in Indian organizations from the mentors' perspective. In particular, the study examines whether the learning goal orientation of a mentor can significantly influence the mentoring process and outcomes for the mentor in a mentoring relationship. Two hundred and thirty- six participants were selected using purposive sampling. Data were gathered using standardized questionnaires. Mediating effects were investigated using the PROCESS model by Hayes, Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression Based Approach. The results indicate high levels of support for several hypotheses examining the direct effects of learning goal orientation on willingness to engage by the mentor, mentoring functions provided and mentor outcomes (personal learning and self enhancement). The overall findings of the study suggest that mentors are not only 'providers' but also 'receivers of learning'. Limitations and directions for future research are also discussed in the paper.

Materials & Method:-

A descriptive and observational, multicentric, hospital-based, questionnaire based study was conducted. The focus of the study is to determineis mentoring of emergency residents necessary or imposition through a multiple choice questionnaire. This information was obtained through a descriptive correlation analytical survey design. Essentially, descriptive and correlation are classed as non-experimental research and in a survey; its purpose of is to observe, describe and document aspects of a situation.

Sample Size Justification:

The incidence of emergency medicine residents is high, widely varies ranging between 25% and 77.8%. [66] So for this study p=0.25

Thus the number of emergency medicine residents required for this study was 200.00~ 200 with power 90% of 95% Confidence Interval.

The formula used for sample size calculation was as follows:-

$n = 4pq / (L^2)$

Where

n= required sample size

p= 0.25 (as per the study)

q = 1 - p

L = Loss % (Loss of information)

Calculation:

Here p= 0.25

q=1-p = 1-0.25=0.75

4pq = 4 x 0.25X0.75= 0.75

$L^2 = 0.00375$

$n = 4pq / (L^2) = 0.75/0.00375= 200.00= 200$

Total 200 emergency medicine residents were selected in our study.

Inclusion Criteria

All residents of emergency medicine evaluating the effect of mentoring on career choices and academic advancement.

Exclusion Criteria

Residents of all other disciplines.

Method of data Collection:-

Information through questionnaire survey is the most common method of data collection in medical research. One study describes the questionnaire as the quickest and cost effective approach when collecting large amounts of information from a large number of people scattered over a wide geographical area. A questionnaire allows a degree of objectivity to the data collected as it is unobtrusive and offers the possibility of complete anonymity of the participant.

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This study is confined among the resident doctors of emergency medicine working at India govt and non govt sectors. The questionnaire included the questions regarding their opinion of mentoring, they are part of any mentoring programme and how mentoring is beneficial for their academic carrier etc. The questionnaire will be E-mailed to the emergency residents all over India by using "SURVEY MONKEY" software .The responses was noted, coded and entered in an excel sheet and analyzed accordingly. The result which was obtained was expressed in terms of percentages and proportions.

Questionnaire Format (Appendix I)

For the purpose of this proposal, a closed question format to collect data will be used. Closed questions yield data that allow for comparison between respondents as all the responses are in the same format, this additionally allows for the collection of valid and reliable data. They can be answered quickly and therefore improve response rates and can be pre-coded, thereby making analysis easier. To determine knowledge level a multiple-choice format was used. One study suggest that this format is appropriate in cases where there is more or less fixed number of alternatives.

Multiple-choice offers the participant a list of responses, from which they select the one most appropriate. The questionnaire that was used in this study is a already validated questionnaire that has been used by a study in their study done in Australia.

Anticipated Benefits

This study is being conducted to help us in the following:

1. What is the view of the residents towards the mentoring programme
2. Is there any mentoring programme available for emergency residents.
3. What is the potential benefits of mentoring programme .
4. What more we can do to improve mentoring programme or start a mentoring if it is not available.

Statistical Analysis:

For statistical analysis data were entered into a Microsoft excel spreadsheet and then analyzed by SPSS (version 27.0; SPSS Inc., Chicago, IL, USA) and GraphPad Prism version 5. Data had been summarized as mean and standard deviation for numerical variables and count and percentages for categorical variables Z-test (Standard Normal Deviate) was used to test the significant difference of proportions. p-value ≤ 0.05 was considered for statistically significant.

Result And Analysis:-

Table:- Distribution of Gender.

Gender	Frequency	Percent
Female	69	34.5%
Male	131	65.5%
Total	200	100.0%

69(34.5%) emergency residents were female and 131(65.5%) emergency residents were male. The value of z is 6.2. The value of p is < .00001. The result is significant at p < .05.

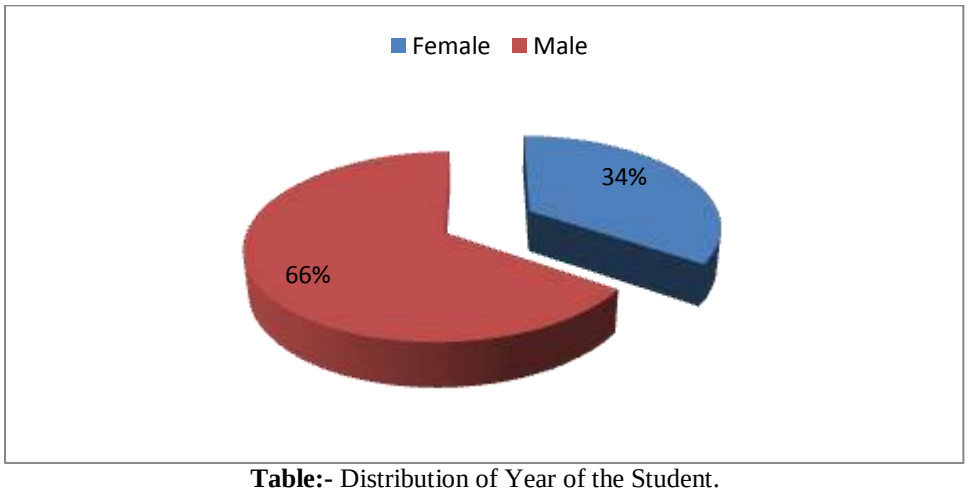


Table:- Distribution of Year of the Student.

Year of the Student	Frequency	Percent
1st	38	19.0%
2nd	113	56.5%
3rd	49	24.5%
Total	200	100.0%

38(19.0%) emergency residents were 1st year's student, 113(56.5%) emergency residents were 2nd year's student and 49(24.5%) emergency residents were 3rd year's student. The value of z is 6.5187. The value of p is < .00001. The result is significant at p < .05.

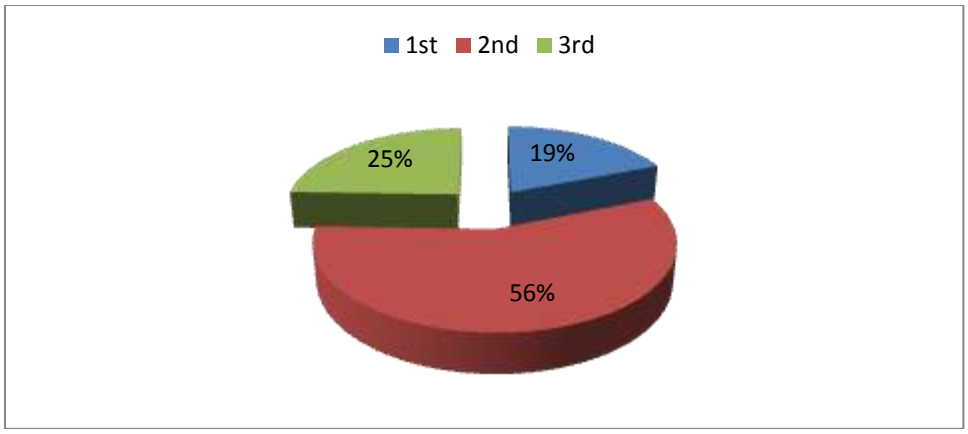


Table:- Distribution of postgraduate residency program.

Postgraduate residency program	Frequency	Percent
DNB-EM	35	17.5%
MEM	137	68.5%
MRCEM	28	14.0%
Total	200	100.0%

35(17.5%) emergency residents were DNB-EM, 137(68.5%) emergency residents were MEM and 28(14.0%) emergency residents were MRCEM. The value of z is 10.3015. The value of p is < .00001. The result is significant at p < .05.

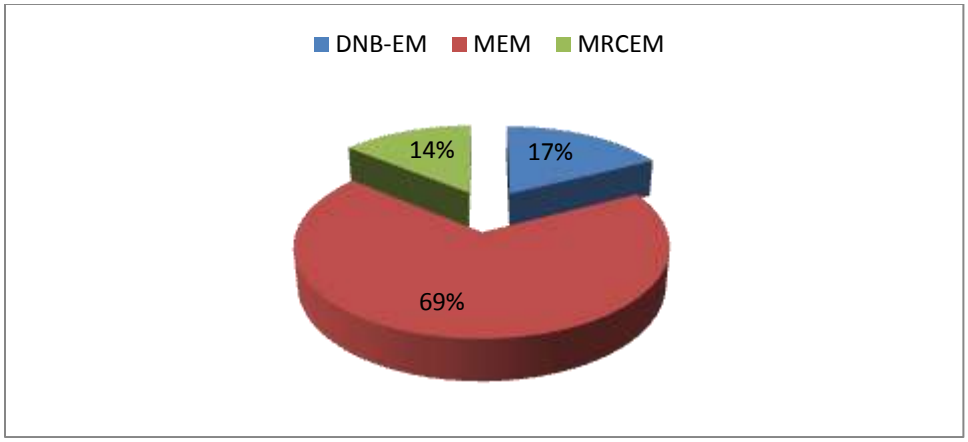


Table:- Distribution of University of Affiliation.

University of Affiliation	Frequency	Percent
GWU	165	82.5%
National Board	35	17.5%
Total	200	100.0%

165(82.5%) emergency residents were from GWU and 35(17.5%) emergency residents were from national board. The value of z is 13. The value of p is < .00001. The result is significant at p < .05.

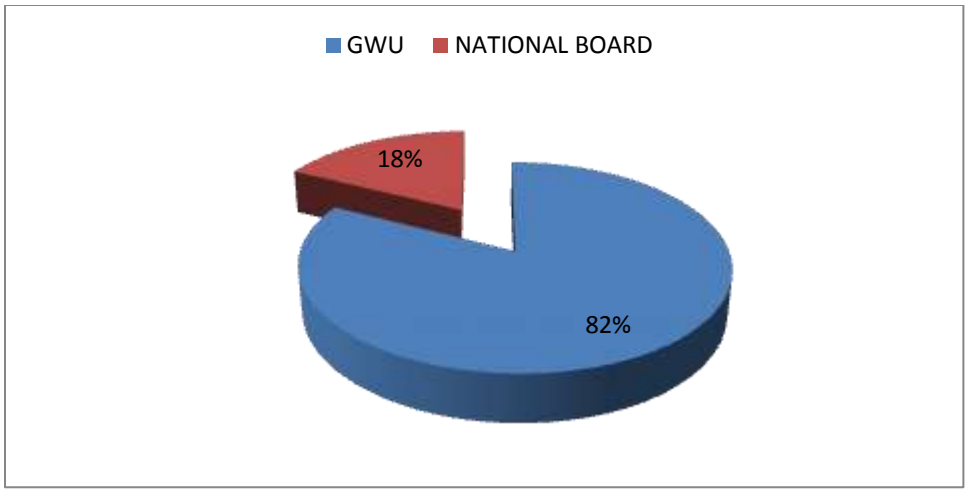


Table:- Distribution of understand by a mentor.

Understand by a mentor	Frequency	Percent
Counselor	4	2.0%
Guide	140	70.0%
Motivator	39	19.5%
Supervisor	17	8.5%
Total	200	100.0%

4(2.0%) emergency residents were understood by counselor, 140(70.0%) emergency residents were understood by guide, 39(19.5%) emergency residents were understood by motivator and 17(8.5%) emergency residents were understood by supervisor. The value of z is 10.1561. The value of p is < .00001. The result is significant at p < .05.

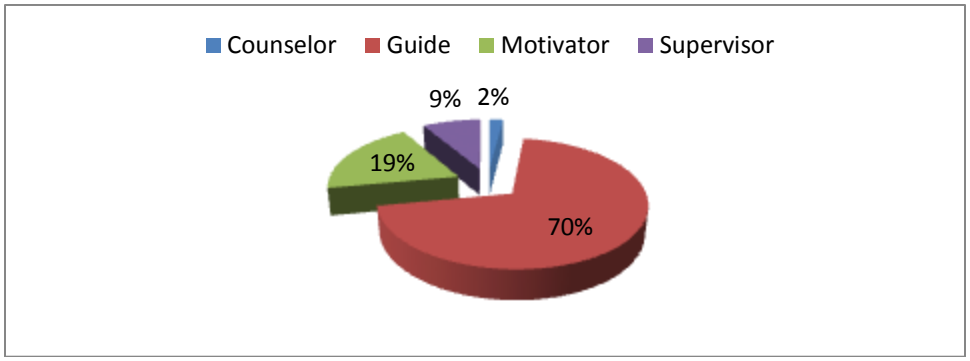


Table:- Distribution part of other emergency medicine residency?

Other emergency medicine residency?	Frequency	Percent
NO	140	70.0%
YES	60	30.0%
Total	200	100.0%

60(30.0%) emergency residents were part of other emergency medicine residency prior to the current one. The value of z is 8. The value of p is < .00001. The result is significant at p < .05.

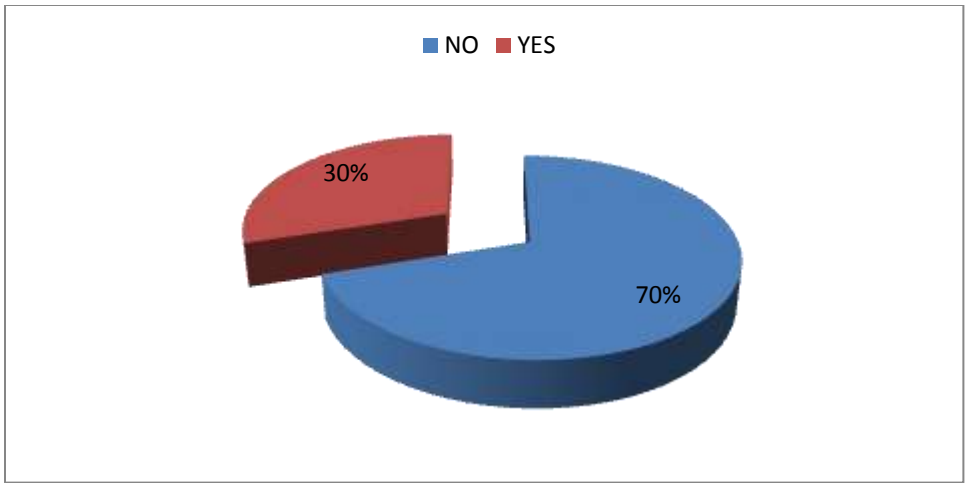


Table:- Distribution of experience of mentoring before.

Experience of mentoring before	Frequency	Percent
NO	144	72.0%
YES	56	28.0%
Total	200	100.0%

56(28.0%) emergency residents had prior experience of mentoring before joining the current program. The value of z is 8.8. The value of p is < .00001. The result is significant at p < .05.

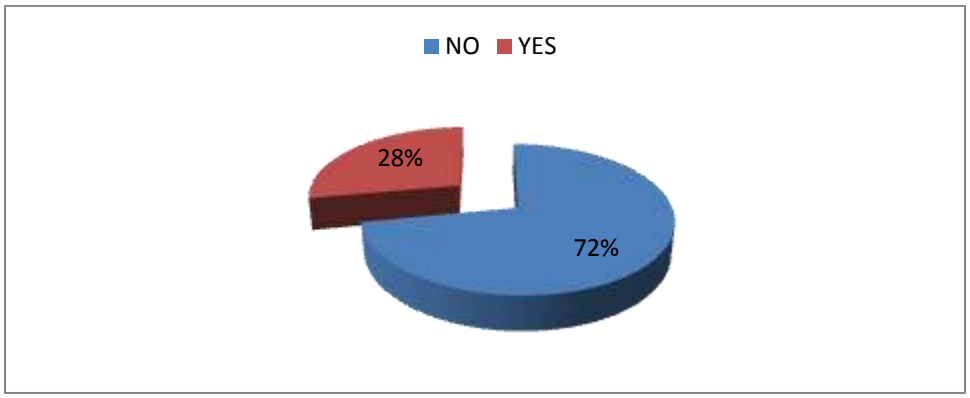


Table:- Distribution of concept of mentoring.

Concept of mentoring	Frequency	Percent
NO	52	26.0%
YES	148	74.0%
Total	200	100.0%

148(74.0%) emergency residents were familiar with the concept of mentoring. The value of z is 9.0041. The value of p is < .00001. The result is significant at p < .05.

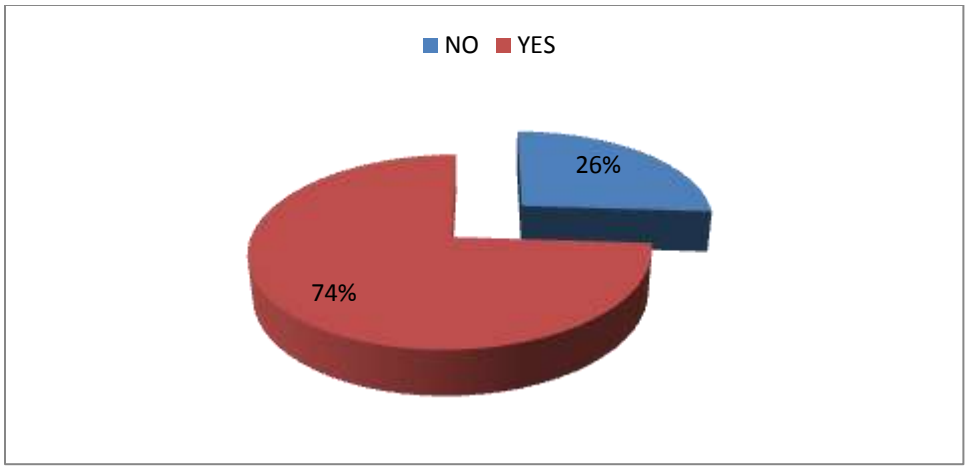


Table:- Distribution of designated mentor.

Designated mentor	Frequency	Percent
NO	56	28.0%
YES	144	72.0%
Total	200	100.0%

144(72.0%) emergency residents had designated mentor. The value of z is 8.8. The value of p is < .00001. The result is significant at p < .05.

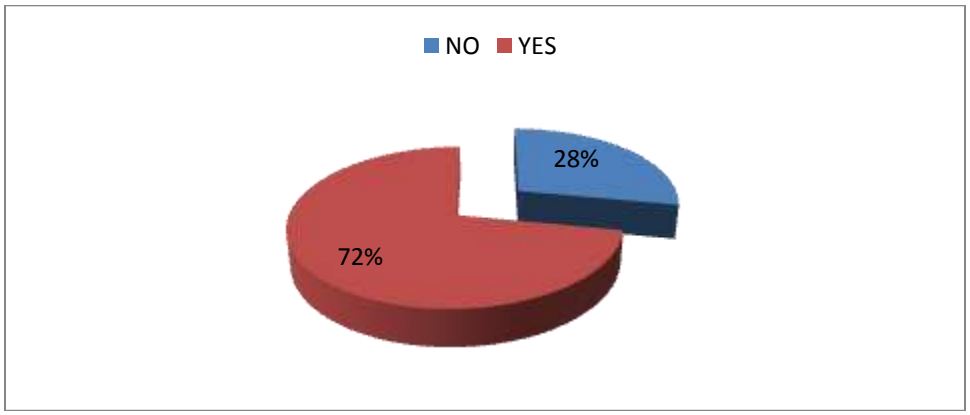


Table:- Distribution of choose your mentor.

Choose your mentor	Frequency	Percent
NO	144	72.0%
YES	56	28.0%
Total	200	100.0%

56(28.0%) emergency residents had chosen their mentor. The value of z is 8.8. The value of p is < .00001. The result is significant at p < .05.

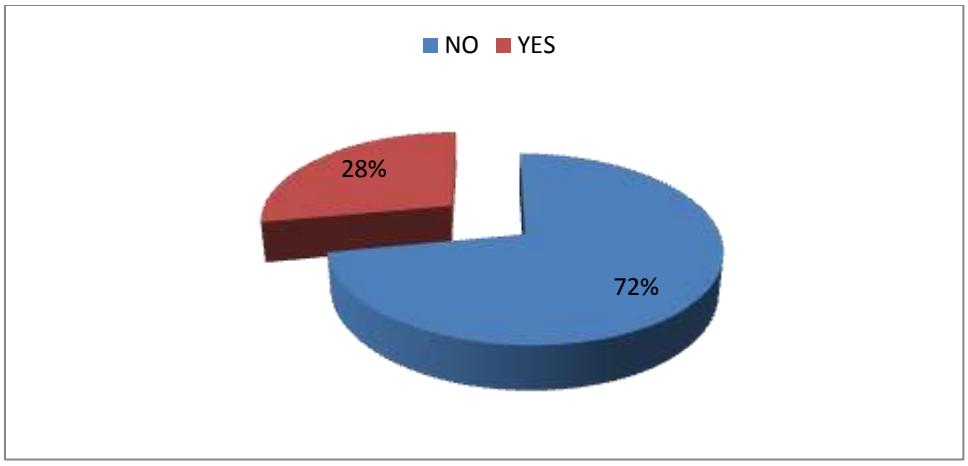


Table:- Distribution of mentoring scheme has helped you with the difficulties.

Mentoring scheme has helped you with the difficulties	Frequency	Percent
NO	74	37.0%
YES	126	63.0%
Total	200	100.0%

126(63.0%) emergency residents had mentoring scheme that helped them with the difficulties. The value of z is 5.2. The value of p is < .00001. The result is significant at p < .05.

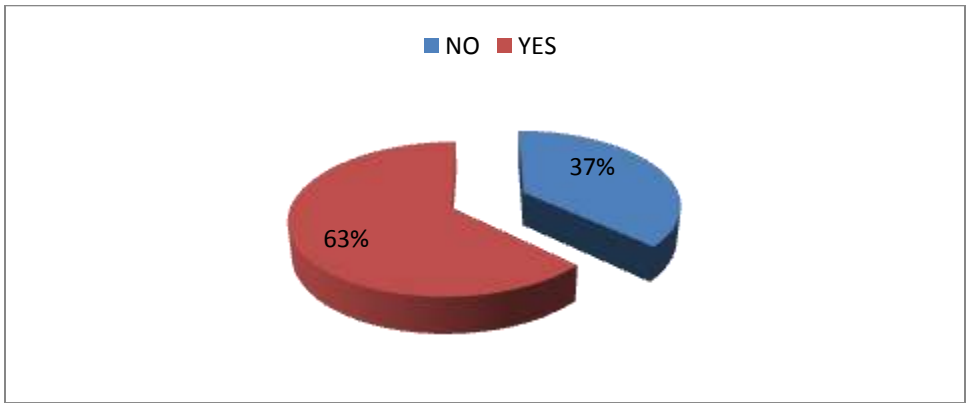


Table:- Distribution of mentoring scheme has met with your expectations?

Mentoring scheme has met with your expectations?	Frequency	Percent
NO	102	51.0%
YES	98	49.0%
Total	200	100.0%

98(49.0%) emergency residents had mentoring scheme that met them with expectations. The value of z is 0.4. The value of p is .68916. The result is not significant at p < .05.

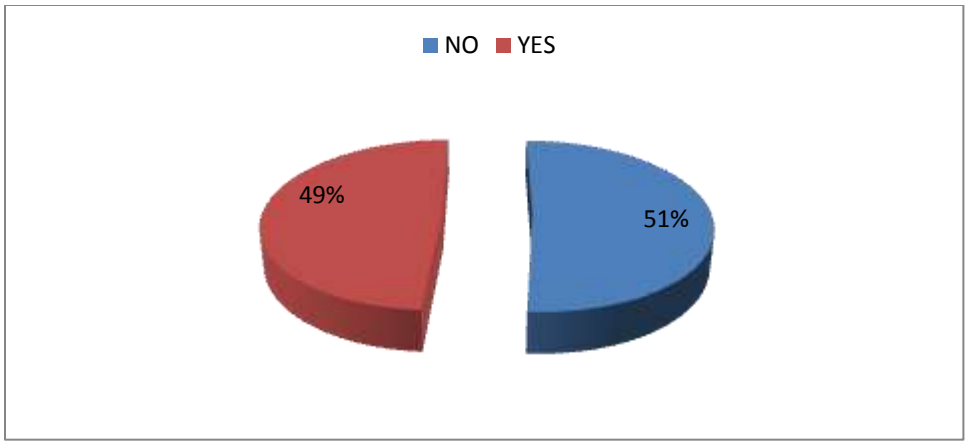


Table:- Distribution of role of mentors should be limited to consultants only?

Role of mentors should be limited to consultants only?	Frequency	Percent
NO	151	75.5%
YES	49	24.5%
Total	200	100.0%

49(24.5%) emergency residents had limited role of mentors to consultants only. The value of z is 10.2. The value of p is < .00001. The result is significant at p < .05.

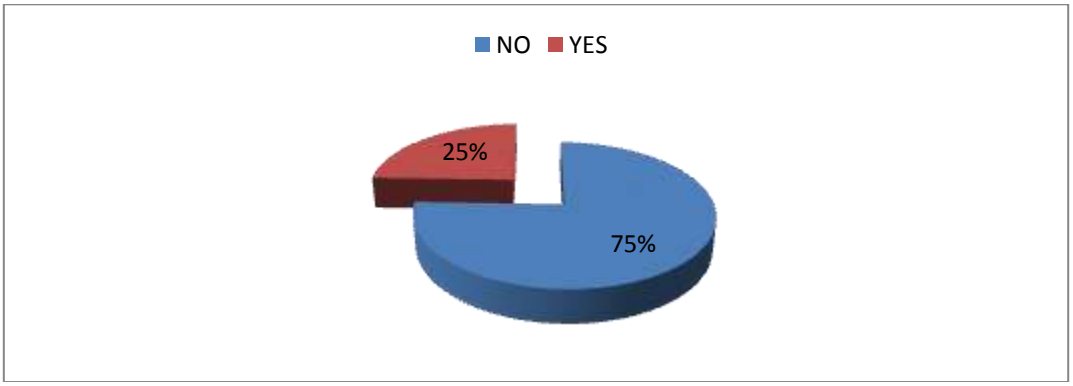


Table:- Distribution of mentors have the time and commitment problems?

Mentors have the time and commitment problems?	Frequency	Percent
NO	103	51.5%
YES	97	48.5%
Total	200	100.0%

97(48.5%) emergency residents had the time and commitment problems. The value of z is 0.6. The value of p is .5485. The result is not significant at p < .05.

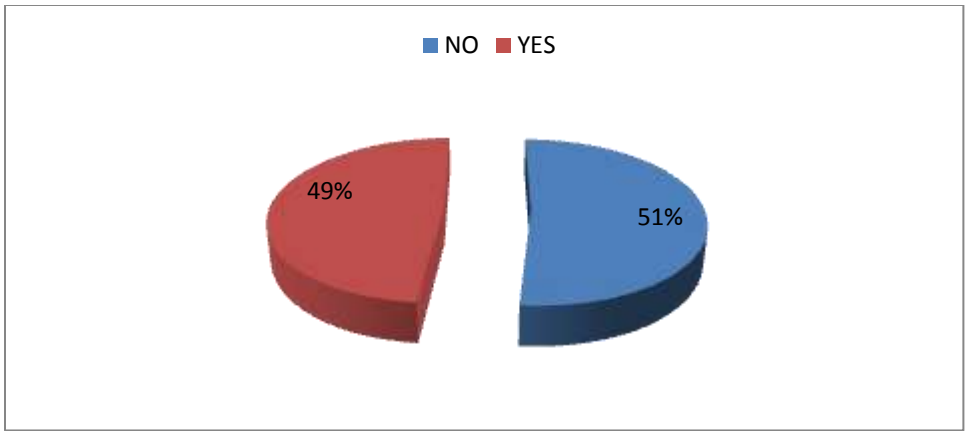


Table:- Distribution of mentoring system as it exists now is beneficial.

Mentoring system as it exists now is beneficial	Frequency	Percent
NO	80	40.0%
Yes	120	60.0%
Total	200	100.0%

120(60.0%) emergency residents had mentoring system as it exists now was beneficial. The value of z is 4. The value of p is .00006. The result is significant at $p < .05$.

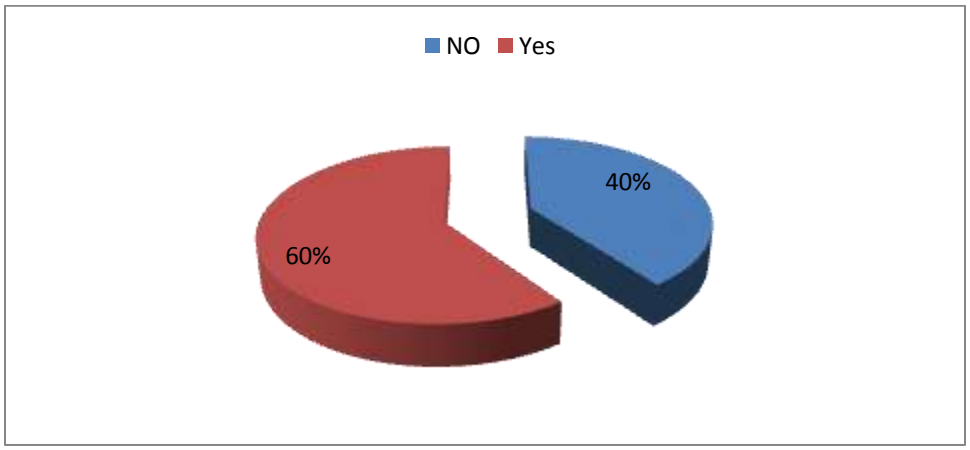


Table:- Distribution of mentoring helped you in formulating career goals?

Mentoring helped you in formulating career goals?	Frequency	Percent
NO	87	44.2%
Yes	110	55.8%
Total	197	100.0%

110(55.8%) emergency resident's monitoring had helped them in formulating career goals. The value of z is 2.3003. The value of p is .02144. The result is significant at $p < .05$.

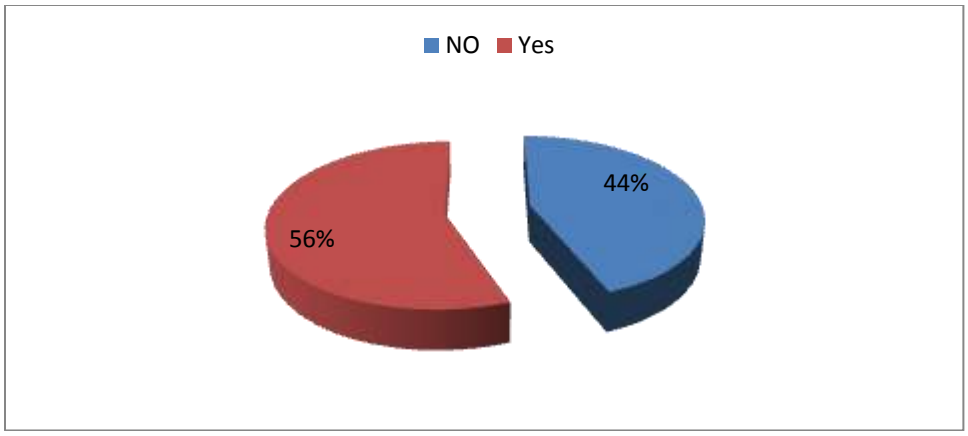


Table:- Distribution of discuss your personal problems.

Discuss your personal problems	Frequency	Percent
NO	124	62.0%
Yes	76	38.0%
Total	200	100.0%

76(38.0%) emergency residents had discussed their personal problems. The value of z is 4.8. The value of p is < .00001. The result is significant at p < .05.

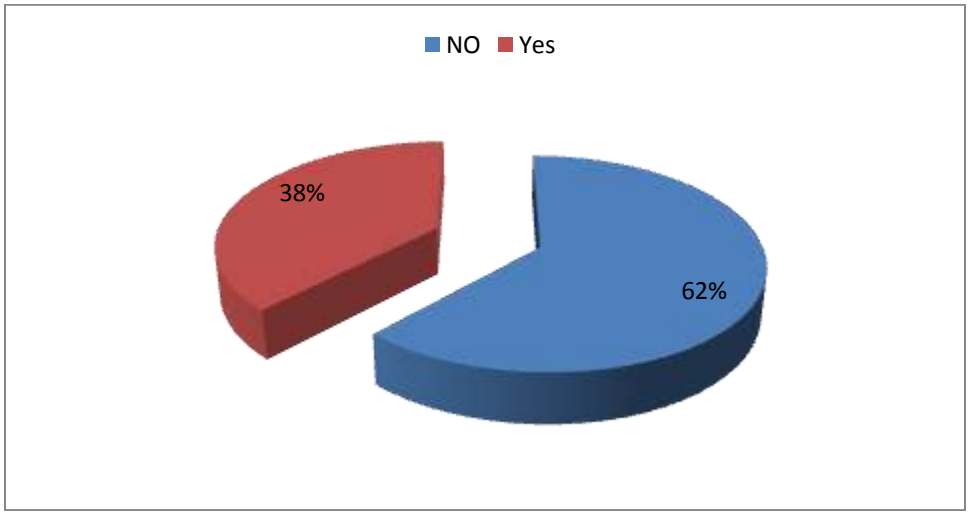


Table:- DO you Think Mentoring Should be compulsory part of your emergency medicine residency?

DO you Think Mentoring Should be part of your emergency medicine residency?	Frequency	Percent
NO	37	18.5%
Yes	163	81.5%
Total	200	100.0%

163(81.5%) emergency residents had compulsory part of their emergency medicine residency. The value of z is 12.6. The value of p is < .00001. The result is significant at p < .05.

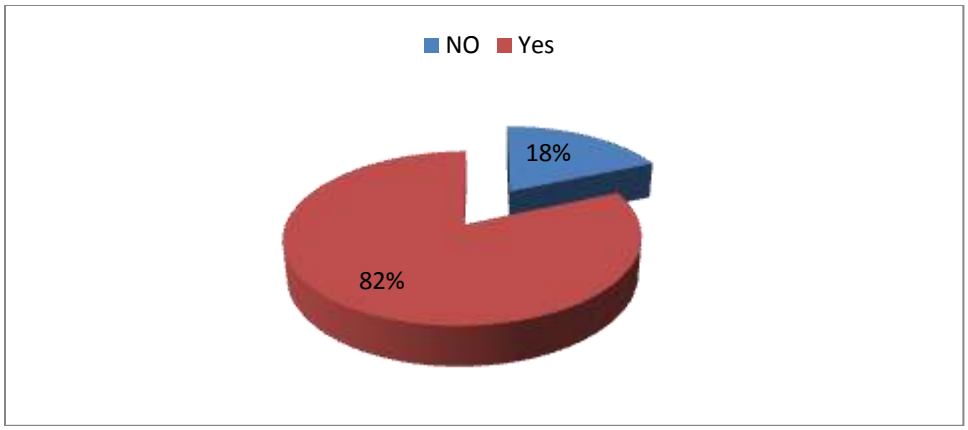


Table:- Distribution of meeting with your mentor.

Meeting with your mentor	Frequency	Percent
Fortnightly	11	5.5%
Monthly	124	62.0%
Once a week	46	23.0%
Quarterly	19	9.5%
Total	200	100.0%

11(5.5%) emergency residents had meet fortnightly with their mentor, 124(62.0%) emergency residents had meet monthly with their mentor, 46(23.0%) emergency residents had meet once a week with their mentor and 19(9.5%) emergency residents had meet quarterly with their mentor. The value of z is 7.8893. The value of p is < .00001. The result is significant at p < .05.

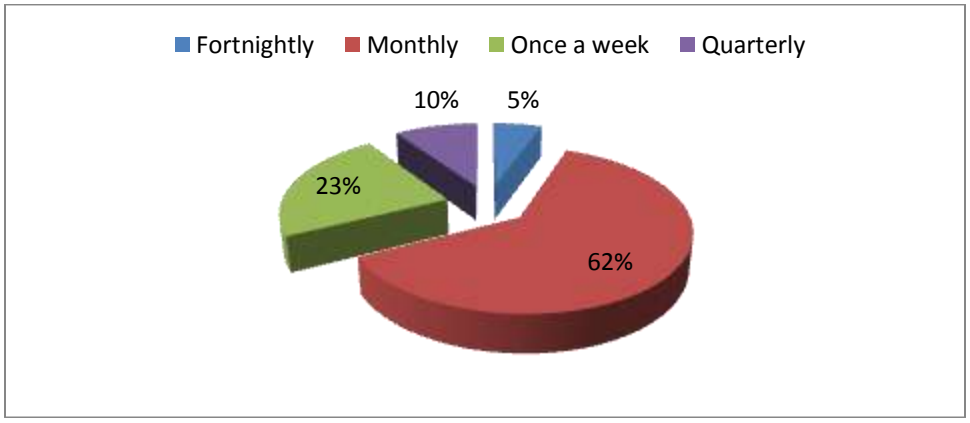


Table:- Distribution of Developing clinical skills.

Developing clinical skills	Frequency	Percent
Somewhat helpful	8	4.0%
Helpful	97	48.5%
Very helpful	81	40.5%
Extremely helpful	14	7.0%
Total	200	100.0%

8(4.0%) emergency residents development were somewhat helpful, 97(48.5%) emergency residents development were helpful, 81(40.5%) emergency residents development were very helpful and, 14(7.0%) emergency residents development were extremely helpful. The value of z is 1.6098. The value of p is .1074. The result is not significant at p < .05.

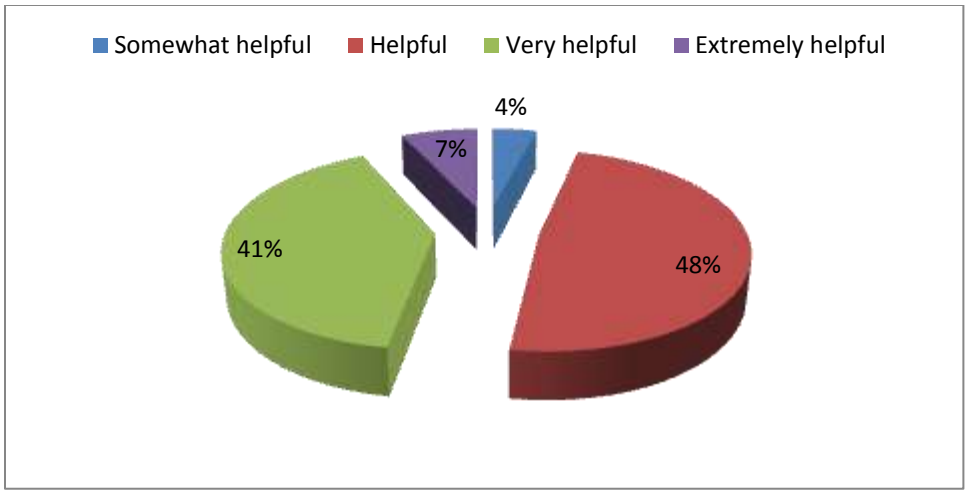


Table:- Distribution of Academic development.

Academic development	Frequency	Percent
Somewhat helpful	22	11.0%
Helpful	58	29.0%
Very helpful	92	46.0%
Extremely helpful	28	14.0%
Total	200	100.0%

22(11.0%) emergency residents academic development were somewhat helpful, 58(29.0%) emergency residents academic development were helpful, 92(46.0%) emergency residents academic development were very helpful and 28(14.0%) emergency residents academic development were extremely helpful. The value of z is 3.5115. The value of p is .00044. The result is significant at $p < .05$.

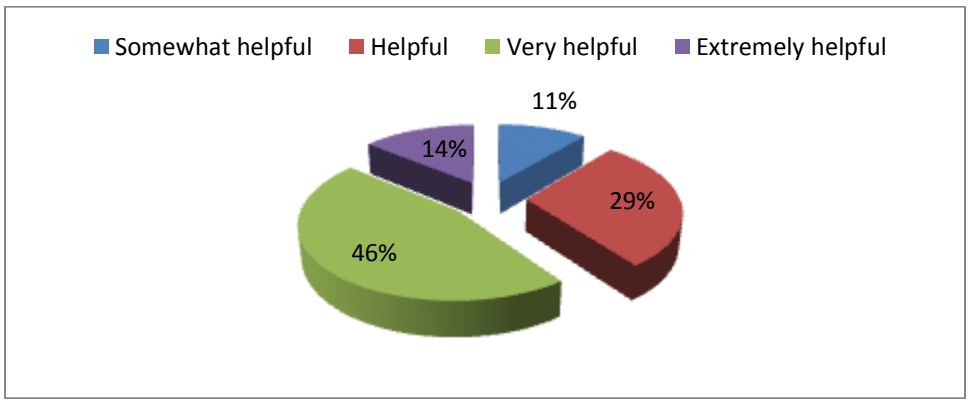


Table:- Distribution of Research and publication

Research and publication	Frequency	Percent
Somewhat helpful	19	9.5%
Helpful	83	41.5%
Very helpful	47	23.5%
Extremely helpful	51	25.5%
Total	200	100.0%

19(9.5%) emergency residents research and publication was somewhat helpful, 83(41.5%) emergency residents research and publication was helpful, 47(23.5%) emergency residents research and publication was very helpful and 51(25.5%) emergency residents research and publication was extremely helpful. The value of z is 3.3899. The value of p is .0007. The result is significant at $p < .05$.

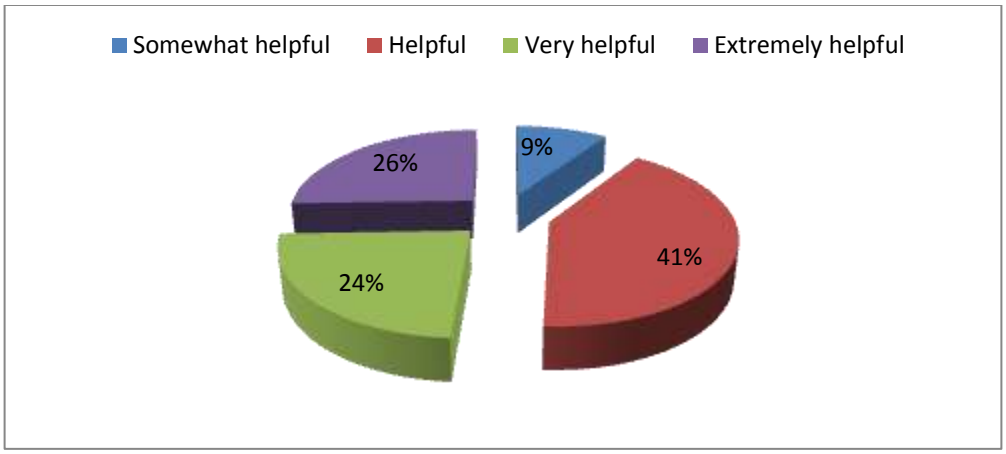


Table:- Distribution of Developing administrative skills.

Developing administrative skills	Frequency	Percent
Somewhat helpful	17	8.5%
Helpful	40	20.0%
Very helpful	126	63.0%
Extremely helpful	17	8.5%
Total	200	100.0%

17(8.5%) emergency residents developing administrative skills was somewhat helpful, 40(20.0%) emergency residents developing administrative skills was helpful, 126(63.0%) emergency residents developing administrative skills was very helpful and 17(8.5%) emergency residents developing administrative skills was extremely helpful. The value of z is 8.727. The value of p is < .00001. The result is significant at p < .05.

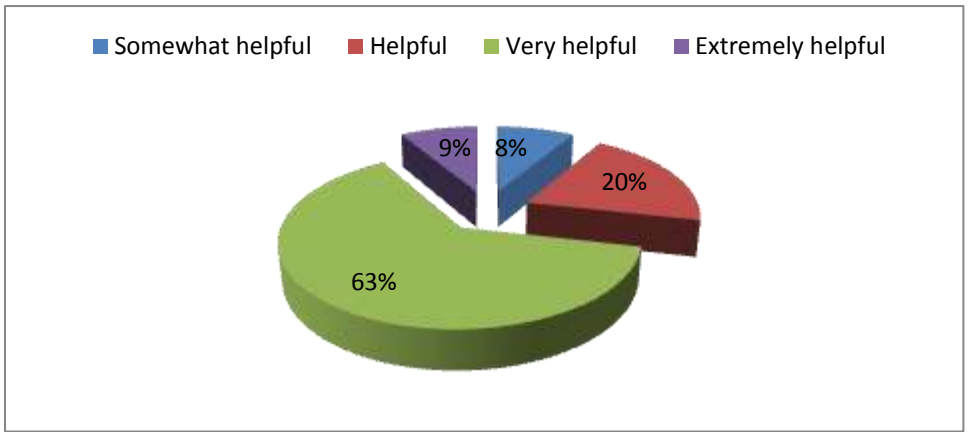


Table:- Distribution of Psychological support.

Psychological support	Frequency	Percent
Somewhat helpful	74	37.0%
Helpful	63	31.5%
Very helpful	45	22.5%
Extremely helpful	18	9.0%
Total	200	100.0%

74(37.0%) emergency residents psychological support was somewhat helpful, 63(31.5%) emergency residents psychological support was helpful, 45(22.5%) emergency residents psychological support was very helpful and 18(9.0%) emergency residents psychological support was extremely helpful. The value of z is 1.159. The value of p is .24604. The result is not significant at p < .05.

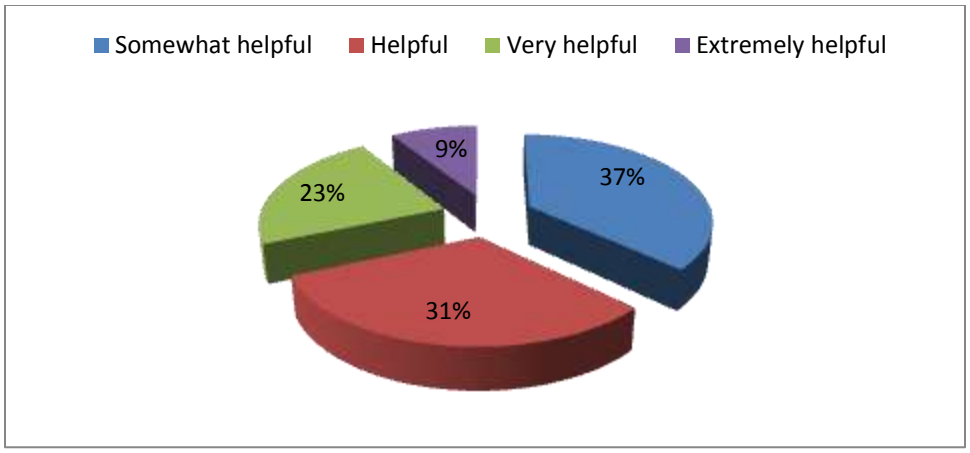


Table:- Distribution of mean Age in Years at PG Student.

	Number	Mean	SD	Minimum	Maximum	Median
Age in Years at PG Student	200	30.2450	6.9777	22.0000	47.0000	28.0000

The mean age in years at PG student (mean± s.d.) of emergency residents was 30.2450 ± 6.9777 years.

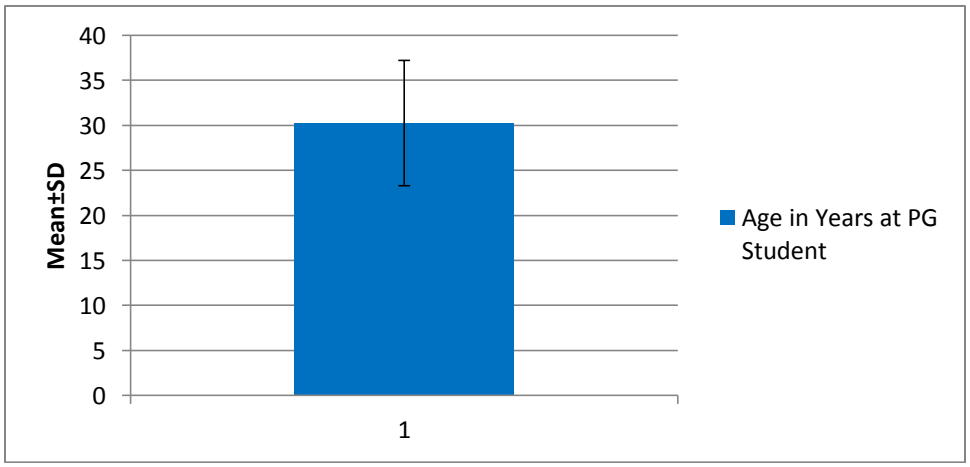
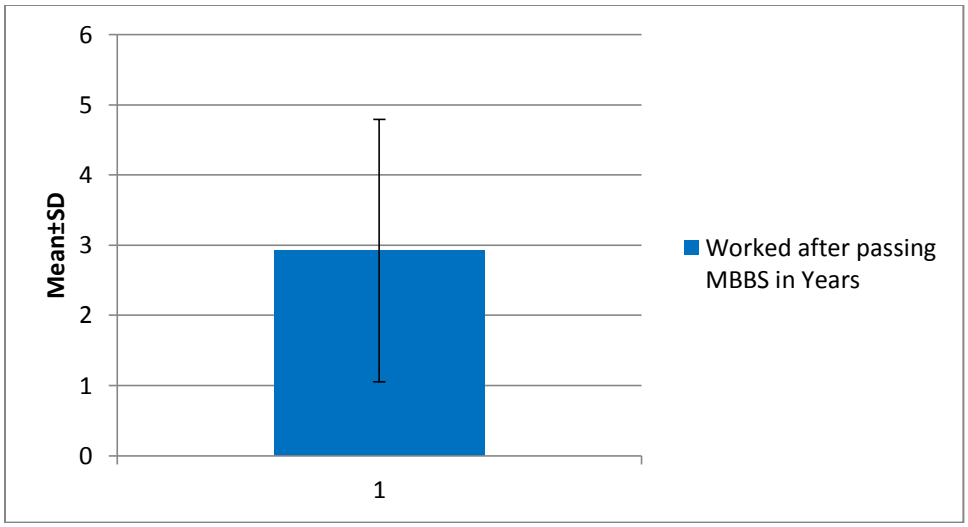


Table:- Distribution of mean worked after passing MBBS in Years.

	Number	Mean	SD	Minimum	Maximum	Median
Worked after passing MBBS in Years	200	2.9250	1.8700	0.0000	8.0000	3.0000

The mean worked after passing MBBS (mean± s.d.) of emergency residents was 2.9250 ± 1.8700 years.



Discussion:-

It was found that the mean age in years at PG student (mean± s.d.) of emergency residents was 30.2450 ± 6.9777 years.

We found that 69(34.5%) emergency residents were female and 131(65.5%) emergency residents were male. Out of 200 students 38(19.0%) emergency residents were 1st year's student, 113(56.5%) emergency residents were 2nd year's student and 49(24.5%) emergency residents were 3rd year's student.
It was found that 35(17.5%) emergency residents were DNB-EM, 137(68.5%) emergency residents were MEM and 28(14.0%) emergency residents were MRCEM. 165(82.5%) emergency residents were from GWU and 35(17.5%) emergency residents were from national board.

We found that 4(2.0%) emergency residents were understood by counselor, 140(70.0%) emergency residents were understood by guide, 39(19.5%) emergency residents were understood by motivator and 17(8.5%) emergency residents were understood by supervisor.

Our study showed that 56(28.0%) emergency residents had prior experience of mentoring before joining the current program and 148(74.0%) emergency residents were familiar with the concept of mentoring. In our hospital 144(72.0%) emergency residents had designated mentor and only 56(28.0%) emergency residents had chosen their mentor.

Our study showed that 126(63.0%) emergency residents had mentoring scheme that helped them with the difficulties. 98(49.0%) emergency residents had mentoring scheme that met them with expectations and 49(24.5%) emergency residents had limited role of mentors to consultants only. We found that 97(48.5%) emergency residents had the time and commitment problems.

It was found that 120(60.0%) emergency residents had mentoring system as it exists now was beneficial. 110(55.8%) emergency resident's monitoring had helped them in formulating career goals. Present study showed that 76(38.0%) emergency residents had discussed their personal problems and 163(81.5%) emergency residents had think compulsory part of their emergency medicine residency.

According to developing clinical skills, 8(4.0%) emergency residents development were somewhat helpful, 97(48.5%) emergency residents development were helpful, 81(40.5%) emergency residents development were very helpful and, 14(7.0%) emergency residents development were extremely helpful. According to academic development, 22(11.0%) emergency residents academic development were somewhat helpful, 58(29.0%) emergency residents academic development were helpful, 92(46.0%) emergency residents academic development were very helpful and 28(14.0%) emergency residents academic development were extremely helpful. 19(9.5%) emergency residents research and publication was somewhat helpful, 83(41.5%) emergency residents research and

publication was helpful, 47(23.5%) emergency residents research and publication was very helpful and 51(25.5%) emergency residents research and publication was extremely helpful.

We found that 17(8.5%) emergency residents developing administrative skills was somewhat helpful, 40(20.0%) emergency residents developing administrative skills was helpful, 126(63.0%) emergency residents developing administrative skills was very helpful and 17(8.5%) emergency residents developing administrative skills was extremely helpful.

It was found that 74(37.0%) emergency residents psychological support was somewhat helpful, 63(31.5%) emergency residents psychological support was helpful, 45(22.5%) emergency residents psychological support was very helpful and 18(9.0%) emergency residents psychological support was extremely helpful.

Conclusion:-

It was found that Maximum emergency residents were male. We found that higher proportion emergency residents were masters in Emergency medicine under GWU. Most of the emergency residents thought mentor as a guide. Our study showed that most of emergency residents were familiar with the concept of mentoring. It was found that most of emergency residents had designated mentor but they did not chose their mentor.

Our study found that maximum emergency residents think development of clinical skills via mentoring was helpful and very helpful for developing administrative skills.

Most of the emergency residents think mentoring was very helpful platform for Academic development and helpful for Research or Publication. But in our study emergency residents think mentoring was somewhat helpful for psychological support.

The mentor–mentee relationship provides mutual benefit to both participants. We suggested that mentoring in increases the likelihood of successful clinical skills and Academic development. It was also found that mentoring was also helpful administrative skills and Research or Publication but it was not that much helpful for psychological support of the student. As emergency medicine is stressful & challenging psychological support is very much necessary .We suggest that attention should be taken towards psychological support. Keys to success are commitment to the mentor-mentee relationship, an awareness of both responsibilities and avoidance of pitfalls.

Limitations Of The Study:-

In spite of every sincere effort my study has lacunae. The notable short comings of this study are:

1. The sample size was small. Only 200 cases are not sufficient for this kind of study.
2. As data collection was done via survey monkey there was a delay and some of them did not response.
3. The study populations are being tested upon a confined set of questionnaire and it may not cover the entire range of questions.
4. The study was carried out in a tertiary care hospital, so hospital bias cannot be ruled out.

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