



Experience of a Formal Mentorship Program at Saudi Board Family Medicine Residency Program in Qassim, Saudi Arabia

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Background: Health care institutes started mentorship programs for the professional and social development of trainees and junior health care staff. The objective of the present study was to find the perceptions of mentees and mentors about the process of the mentorship program at Qassim Family Medicine academy.

Methodology: A cross-sectional study was carried out among the mentees (60) and mentors (31) affiliated with Family Medicine Academy, Qassim in September 2022. Data was collected using a semi structured questionnaire. Data was analyzed with SPSS.

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Results: A total of 60 mentees and 31 mentors participated. The majority of mentees opined that the mean number of mentor meetings was 2.76 per year. Mentees perceptions about clear objectives in their meeting was 71.7%, the same percentage (70%) mentioned as opportunity to discuss strengths and weaknesses in the mentor meeting. Seventy-seven percent of the mentors opined that mentee achieved their set targets large extent to fully. The mentees mean overall satisfaction and standard deviation about the mentorship program was 7.5 ± 2.72 , mentors overall satisfaction was reported 7.8 ± 1.7 out of 10.

Conclusions: Based on the findings, mentors and mentees were overall satisfied with the mentorship program. But, Mentees' perceptions about social or psychological problems and professional development agreed was nearly fifty percent only. On the other hand, mentors had concerns related to the keenness of mentees for the mentorship meeting. There is a need to focus on these domains in the forthcoming mentorship programs.

Keywords: Mentees; mentors; family medicine; mentorship program; perceptions; Saudi Arabia.

1. INTRODUCTION

The importance of mentorship within health care training is well recognized. Mentorship enhances workforce performance, engagement and promotes learning opportunities and multidisciplinary collaboration. There are both career and life benefits associated with mentorship and recognized as a bidirectional process. Recently, mentoring has been considered an essential step in professional and personal development, particularly in the field of health care [1].

Literature review shows that mentorship is beneficial for both mentees and mentors [2]. Mentorship is a formal yet friendly relationship; this is a partnership between mentor and resident (i.e. the mentee). Residents are expected to take the mentoring opportunities seriously and help the mentor to achieve the outcomes. The classic definition of a mentor is someone in an advanced position or with experience who guides, teaches, and develops a novice [3]. Across various professional domains, mentorship is viewed as a beneficial endeavour in promoting professional growth and also in medical education development [4].

Mentorship has been associated with benefits in career selection, career advancement, research interests, and publication productivity [5,6]. The goals expected from mentor meetings are to guide residents towards personal and professional development through continuous monitoring of progress, early identification of struggling residents as well as high achievers, early detection of residents who are at risk of emotional and psychological disturbances and provide career guidance. Similarly, individuals who reported never having a mentoring

relationship have implicated it as a major factor hindering their career progression [7,8].

Success in this relationship is believed to require engagement from both mentors and mentees. Ideal mentors are often described as career guides and display a commitment to their mentees [9]. Similarly, mentees are expected to be active participants, demonstrating initiative and appreciation for their mentor [1,3,8,10]. In Family medicine (FM), mentorship is believed to be an important determinant of professional success and development [9,11]. Despite these perceived benefits, there is significant variation in the definition and degree of mentorship [12]. Mentorship can be developed spontaneously, based on mutual interests, or set up more formally [13,14].

Mentorship programs are designed in such a way, according to the scheduled meeting, there will be periodical meetings between mentor and mentee at regular interval. Such programs are becoming more common in residency training. Because of the lack of a universal structure in this context, there are no widely shared criteria for the evaluation of effectiveness [15]. This is particularly true in Family Medicine (FM), and therefore, mentorship program is a influence, guidance, advise and support for the social and psychological development including overall development that led to disparate views regarding the true benefit of this relationship [6,16].

Some sources have cited that about the drawbacks in mentorship in FM, there is even less of an understanding of mentorship program between mentees and mentors regarding the concept [17]. For this reason, it had been common place for FM physicians to seek

mentorship outside the specialty [18]. As the specialty grows and the number of FM physicians increases, trainees can expect to find more support within the specialty [11].

More recent work shows that FM residents seem to seek out mentorship, particularly from more senior physicians [19]. The existing evidence also supports the notion that mentorship during FM training does help in developing skills related to professionalism and research [20,21]. However, little is known regarding how mentorship during FM residency training ultimately affects independent practice [11]. Therefore, the impact of mentorship on professional development, particularly in FM, remains unclear.

Generally, at our FM residency program, the selection of mentors is based on resident choice. Certain tasks will be discussed during the quarterly mentor meeting, such as direct clinical observation skill, competency assessment, assistance with lecture preparation, feedback on presentations, simulation sessions and discussions about career development. Faculty participation plays a key role in the process of the annual review. The aim of this survey was to study the experience of a Formal Mentorship Program in terms of mentees' and mentors' satisfaction, suggestions and comments from the mentees and mentors in Family Medicine Residency Program, Qassim.

1.1 Research Question

What is the process of mentorship program at Family Medicine Academy?

2. METHODOLOGY

2.1 Study Setting

A cross-sectional study was conducted among mentees and mentors working at thirteen different primary health care centres attached to Family Medicine Academy (FMA), Qassim.

2.2 Sampling

We included all the mentees (80) and mentors (32) associated with FM academy. At the time of the study, there were a total of 80 mentees and 32 mentors who have participated in the mentorship program in the last two years.

2.3 Inclusion Criteria

All the current residents registered in mentorship program working at FMA at the time of study and those who graduated from the program in the preceding year. The main purpose of inclusion of last year graduated persons in this study, as they have completed mentorship program recently and they have the liberty to express their views.

2.4 Exclusion Criteria

FMA faculty members who did not complete 1 year as mentors.

2.5 Data Collection Tool

A questionnaire was developed based on the previous studies conducted in different institute settings. In the process of development of the questionnaire, all the authors arranged and discussed about the questionnaire development. The same authors conducted meetings on three occasions to build the questionnaire based on the objectives mentioned in the study.

A questionnaire consists of two parts. First part dealt with mentor and mentee demographic characteristics and type of communication used between the mentees and mentors to initiate the meeting. Second part of the questionnaire stated that the mentees opinions about mentor meeting domains, perceptions of mentees about the mentors characteristics and lastly mentors perceptions about mentees milestones development during the tenure of 2 years mentorship program at FMA.

2.6 Data Collection Procedure

After completion of the questionnaire, pilot study was conducted among the 30 persons to see the feasibility and arrangement of the questions. This 30 sample not included in the main sample of study. In relation to face validity of the questionnaire, questionnaire distributed to the subject experts, research colleagues for refinement and validity of the questionnaire was checked.

The questionnaire was prepared and distributed through Google forms to all the mentees working at FMA, last year graduated doctors also shared, criteria fitted to our study. Similar way, another questionnaire prepared for mentors and circulated through Google forms to all the eligible mentors.

Questions related to mentor meetings and mentor characteristics, a five-point Likert scale was used as 1 to 5 (statement from “strongly agree” to “strongly disagree”). Participants were asked about the overall quality of the programme and this question made options from the scale of 1 to 10 and also collected opinions about each component of mentorship. Two open ended questions like suggestions to improve mentorship program from the mentees as well as mentors taken. Similar way from the mentors also collected opinions for the mentorship program improvement. Another important open ended question comments from the mentors and mentees also collected. These two open ended questions analysed with Microsoft Excel based on common themes, later frequencies were calculated for the responses.

2.7 Statistical Analysis

Data was initially transferred to Microsoft Excel from the Google forms. Then MS- excel data was transferred to Statistical Package for Social Sciences (SPSS) for the interpretation of the inferential statistics. For continuous variables like age, duration of mentor meeting and with mentorship program, mean and standard deviations were calculated. For the categorical variables comparison between level of training (Junior and senior level) with mentor meeting domains and mentor characteristics, “Chi Square” test was applied. Linear regression was used to predict the variable of mentorship overall satisfaction score with socio-demographic characteristics like age, duration of mentorship of the mentees. A probability (p) value of ≤ 0.05 was considered as statistically significant.

3. RESULTS

The current study mentees questionnaire was distributed to 80 participants through WhatsApp groups with periodical reminders (every 3 days) out of which 60 answered. The response rate in the mentee study sample was 75% (60/80). Same way, distributed the questionnaire to the mentors and found response rate among the mentors to be 96.8% (31/32).

Mean mentee age and standard deviation in the study population reported as 29 ± 2.4 years and age range was 10 years (25-35 years). About 75% of the mentee study participants were below the age of 30 years in our study. The mean age

of the mentor participants was 42.3 years and about 58.1% were female mentors.

Nearly 85% mentees gave opinion as allowed mentor on their own interest and majority (63.3%) opined that their mentor should be consultant doctor position. Training experience among the mentors was 7.5 years and mean mentorship experience among the same mentors was 4 ± 4.4 years. Median number of mentees' was two (2) in number with each of the mentors. In each meeting, mentors mean duration of meeting expressed as about 25 minutes per session (Table 1).

Linear regression analysis was used with the overall satisfaction of the mentorship program with mentees' age, opinion on the suitable number of mentor meetings and duration of the mentor meetings and to predict the one variable based on the other variable of overall satisfaction of mentorship, which was not significant ($P > 0.05$). The mean overall satisfaction and standard deviation about mentorship program was 7.5 ± 2.7 expressed by mentees. Mentors mean overall satisfaction in mentorship program observed as 7.8 ± 1.7 .

The Fig. 1 showed as most common types of channel used to conduct the mentor meeting as personal communication (85%), followed by WhatsApp communication was 75% among the mentees. Almost similar observation was observed among the mentors, as personal communication was 93.5% and next to other channel as WhatsApp and phone communication was 71% each.

Table 2 depicted that in the present study nearly half of the junior level (48.1%) mentees agreed on mentor meeting being useful for improving quality. Among the senior level agreed opinion mentioned as 63.6%. Similarly, about junior level mentees expressed 81.5% have agreed as discussed about strengths and weaknesses during mentor meeting. Among the senior level mentees agreed status for the same reported as 60.6%.

Though there was difference in percentages between junior level and senior level mentees opinions. But there was no statistically significant observation was noticed between different level of mentees opinions with mentor meeting domains ($P > 0.05$).

Table 1. Demographic characteristics among the Mentees and Mentors working at primary health care centre attached to Family Medicine Academy

Variables	Mentees Number (%)	Mentors Number (%)
Gender: Males	42 (70%)	18 (58.1%)
Females	18 (30%)	13 (41.9%)
Age ± SD (n=60 & n=31)	29.08 ± 2.410	42.30 ± 9.70
Level of Training: Junior level (R1+R2) & Senior Registrar	27 (45%)	10 (32.3%)
Senior level (R3+R4) & Consultant	22 (36.6%)	21 (67.7%)
Graduated last year	11 (18.3%)	
Previous mentorship experience of Mentors		23 (74.2%)
Training experience of Mentors (years) ± SD		7.5 ± 6.8
Mean Mentorship experience (years) ± SD		4.0 ± 4.4
Allowed to select my mentor	51 (85%)	
Opinion of mentor about position: consultant	38 (63.3%)	
Present Mentor status – Consultant	44 (73.3%)	
Average duration of mentor meeting (n=60)	23.36 minutes ± 10.64 (SD)	25.7 minutes ± 13.60 (SD)
Suitable number of mentor meetings (n=50)	2.76 ± 1.57	

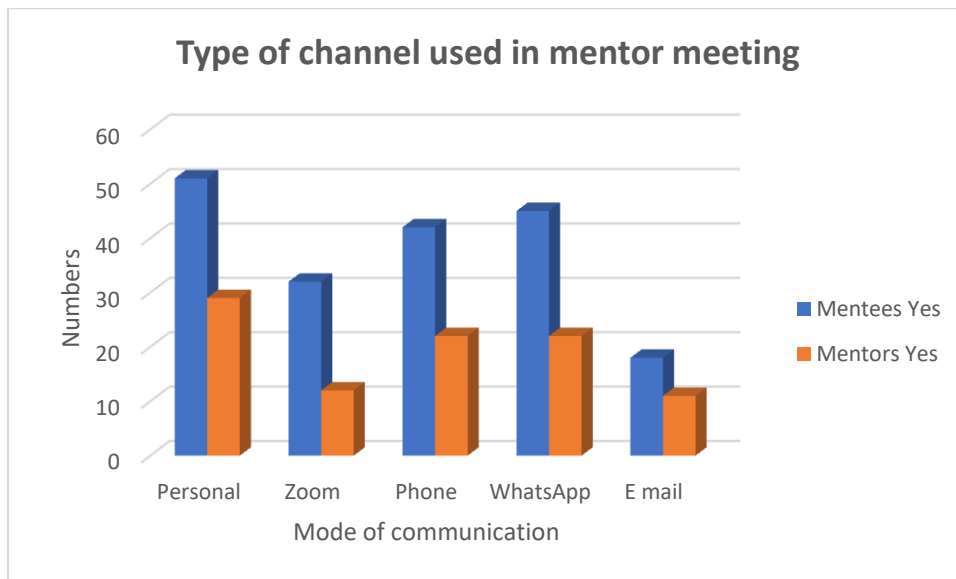


Fig. 1. Type of channel used to complete the mentor meeting

Table 3 showed that in the current study, nearly 78% of junior level mentees agreed perceptions about mentor professional, helpful and respectful, whereas among the senior level mentees perceptions for the same was 85%. In relation to the variable of mentor helped in problem solving and decision making, closely 63% of junior level mentees agreed, only 55% of senior level mentees agreed for the same.

Similarly, for the variable of opportunity to discuss social or psychological problem during mentor meeting, 66.7% of junior level mentees

agreed and about 54.6% senior level mentees agreed for the same variable. Another important domain of professional development during the mentor meeting, about 48.1% of junior level mentees agreed opinion, almost same percentage (45.4%) of senior level mentees agreed for the same variable.

In relation to mentor provided constructive feedback, about 63% of junior level mentees gave agreed opinion and almost same percentage (66.7%) of senior level mentees expressed as agreed opinion for the variable of constructive feedback.

Table 2. Opinions of Mentees about mentor meetings domains and its process according to level of training in the study population

Variables	Opinions of Mentees about 4 mentor meetings/year			χ^2 test & P value
Level of training	Agree	Neutral	Disagree	
Junior	13 (48.1%)	4 (14.8%)	10 (37%)	$(\chi^2-1.298, 2df, P-0.523)$
Senior	21 (63.6%)	6 (18.2%)	6 (18.2%)	
Level	Objectives of Mentor meeting clear			
Junior	21 (77.8%)	2 (7.4%)	4 (14.8%)	$(\chi^2-3.30, 2df, P-0.220)$
Senior	22 (66.7%)	8 (24.2%)	3 (9.1%)	
Level	Mentor meeting useful for improving quality			
Junior	13 (48.1%)	9 (33.3%)	5 (18.5%)	$(\chi^2-1.467, 2df, P-0.480)$
Senior	21 (63.6%)	8 (24.2%)	4 (12.2%)	
Level	Opportunity to discuss strengths & weakness for final evaluation reports			$(\chi^2-3.499, 2df, P-0.174)$
Junior	22 (81.5%)	3 (11.1%)	2 (7.4%)	
Senior	20 (60.6%)	10 (30.3%)	3 (9.1%)	
Level	Opportunity to discuss about the obstacles during previous rotation			$(\chi^2-1.414, 2df, P-0.493)$
Junior	21 (77.7%)	5 (18.5%)	1 (3.7%)	
Senior	21 (63.6%)	10 (30.3%)	2 (6.1%)	

Table 3. Perceptions of Mentees about Mentor characteristics in relation to level of training in the study sample

Variables	Perceptions of Mentees about healthy atmosphere			χ^2 test & P value
Level of training	Agree	Neutral	Disagree	
Junior	20 (74.1%)	5 (18.5%)	2 (7.4%)	$(\chi^2-530, 2df, P-0.676)$
Senior	27 (81.8%)	5 (15.2%)	1 (3.0%)	
Level	Mentor Professional, helpful & respectful			$(\chi^2-3.93, 2df, P-0.139)$
Junior	21 (77.8%)	3 (11.1%)	3 (11.1%)	
Senior	28 (84.9%)	5 (15.1%)	0 (0%)	
Level	Helped in problem solving & decision making			$(\chi^2-1.587, 2df, P-0.452)$
Junior	17 (62.9%)	6 (22.2%)	4 (14.8%)	
Senior	18 (54.5%)	12 (36.4%)	3 (9.1%)	
Level	Encouragement in self-learning			$(\chi^2-1.899, 2df, P-0.387)$
Junior	18 (66.7%)	8 (29.6%)	1 (3.7%)	
Senior	26 (78.8%)	5 (15.1%)	2 (6.1%)	
Level	Opportunity to discuss Social or Psychological problem			$(\chi^2-1.667, 2df, P-0.435)$
Junior	18 (66.7%)	5 (18.5%)	4 (14.8%)	
Senior	18 (54.6%)	11 (33.3%)	4 (12.1%)	
Level	Discusses Professional development			$(\chi^2-1.847, 2df, P-0.397)$
Junior	13 (48.1%)	6 (22.2%)	8 (29.6%)	
Senior	15 (45.4%)	12 (36.4%)	6 (18.2%)	
Level	Mentor approachable and available			$(\chi^2-0.530, 2df, P-0.767)$
Grade	Always	Some time	Rarely	
Junior	23 (85.2%)	3 (11.1%)	1 (3.7%)	
Senior	30 (90.9%)	2 (6.1%)	1 (3.0%)	
Level	Mentor provided constructive feedback			$(\chi^2-0.119, 2df, P-0.942)$
Junior	17 (63%)	6 (22.2%)	4 (14.8%)	
Senior	22 (66.7%)	7 (21.2%)	4 (12.1%)	
Mentees overall satisfaction about mentorship program	Best Satisfaction Grade ≥ 7 ($\geq 70\%$)	Borderline Satisfaction Grade 5-<7 (50-<70%)	Poor Satisfaction Grade < 5 (<50%)	9 (15%)

There was no significant association was observed with different levels of mentees perceptions with different variables of mentor characteristics like healthy atmosphere, approachable and available, professional, problem solving, decision making, encouragement in self-learning, professional development, social and psychological development and constrictive feedback ($P>0.05$).

Table 4 showed that about the adequacy of number of planned mentorship sessions each academic year (which is 4), 48% were agree and 32% strongly agree. About 84% agreed or strongly agreed about the clarity of objectives of mentorship meetings. Majority (87%) agreed that mentorship program is beneficial for improving the quality of training. A little more than three fourths (77%) opined that mentee achieved their set targets large extent to fully. About the keenness of mentees to complete the mentorship meeting, 6.5% disagreed and 22.6% were neutral. Only close to forty percent (41.9%) reported that mentees are always available for the meetings. The mean mentors satisfaction score on a scale of 10 was 7.8.

Table 5 highlighted that only 4 (6.6%) were mentioned as mentorship is not required, 3.3% were stated as 4 mentor meetings are not required. Majority (65%) mentees didn't give any

comments about present functioning mentor meetings. Nearly 26% of Mentors commented as mentor meeting is important and need modification exam, communication and updates in the meeting. 6.4% of mentors commented about time management and 3.2% of each mentors commented about gender variation in Qassim culture and non-Saudi orientation about local issues.

Table 6 revealed about suggestions of mentees, nearly 06 (10%) mentees suggested that 2 mentor meetings in a year, 8.3% of mentees mentioned as mentor meeting must be focused on learning, exam preparation, and training issues in the mentor meeting. Small percentage of 3.3% mentees mentioned as 3 mentor meetings in a year, mentors required training and mentee can contact the mentor as and when needed irrespective of restricted meetings. 61.7% of Mentees (37) also not given any suggestions for current mentorship program.

Close to half of the mentors (45.1%) suggested about current mentorship program, trainees need proper plan, orientation, checklist and training before mentoring session is scheduled. 16.1% of mentors suggested 5 mentor meetings in a year, 9.6% of mentors suggested face to face communication of mentor meeting.

Table 4. Mentors satisfaction about the Mentees milestones in Mentorship program

Mentors perceptions	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
Mentorship meetings adequate	10 (32.3%)	15 (48.4%)	5 (16.1%)	1 (3.2%)	0 (0%)
Objectives of Mentorship meeting clear	12 (38.7%)	14 (45.2%)	5 (16.1%)	0 (0%)	0 (0%)
Mentorship program useful for improving quality	15 (48.4%)	12 (38.7%)	3 (9.7%)	1 (3.2%)	3 (5%)
Progress of Mentee through mentorship	8 (25.8%)	19 (61.3%)	3 (9.7%)	1 (3.2%)	0 (0%)
Mentees keen to complete mentorship	7 (22.6%)	15 (48.4%)	7 (22.6%)	2 (6.5%)	0 (0%)
Grade	Fully	Large extent	Partial	Little extent	Not yet all
Mentee achieved the set targets	8 (25.8%)	16 (51.6%)	5 (16.1%)	1 (3.2%)	1 (3.2%)
Grade	Always	Often	Sometimes	Rarely	Never
Mentees are eager to learn	6 (19.4%)	14 (45.2%)	4 (12.9%)	7 (22.6%)	0 (0%)
Mentees are available on time	13 (41.9%)	11 (35.5%)	6 (19.4%)	1 (3.2%)	0 (0%)
Overall satisfaction of Mentors Mean \pm SD	7.8 \pm 1.7				

Table 5. Comments from Mentees and Mentors about existing mentor meeting

Mentee comments number (%)	Mentor Comments number (%)
<ul style="list-style-type: none"> • Great idea, helpful, respectful, available, lucky, satisfied, mentor is good 10 (16.7%) • Mentorship is not required 4 (6.6%) • No need 4 meetings per year 02 (3.3%) • Residents choose mentor 02 (3.3%) • Mentorship should not have deadlines 01 (1.7%) • Train the mentor 01 (1.7%) • Need to be improved 01 (1.7%) 	<ul style="list-style-type: none"> • Mentor meeting is important need modification 8 (25.8%)(exam, communication and updates) • Mentor meeting frequency 2 (6.4%) • Need to be discussed in meeting with mentors 2 (6.4%) • Time management issues 2 (6.4%) • Non-Saudi mentors lack of knowledge about local issues 1 (3.2%) • Gender variation in Qassim culture 1 (3.2%) • List of mentee and mentors in the beginning of the year 1 (3.2%) • Mentor meeting in Academy 1 (3.2%)

Table 6. Mentees and Mentors suggestions to improve mentor meeting

Mentee suggestions number (%)	Mentors suggestions number (%)
<ul style="list-style-type: none"> • Mentor meetings frequency 08 (13.3%), which includes 2 mentor meetings – 6 (10%) and 3 mentor meetings – 2 (3.3%) • Discussion about training, learning, exam preparation & focussed discussion 07 (11.6%) • Allow residents to select their mentors 02 (3.3%) • Contact mentor when needed (irrespective of number of meetings) 02 (3.3%) • One mentor during all the 3 years 01 (1.7%) • Other causes 3 (5.1%) like extra work (1), qualify people (1) and online meeting (1) 	<ul style="list-style-type: none"> • Plan, orientation, checklist and training before mentoring 14 (45.1%) • Frequency of meetings 5 (16.1%) • Communication issues (Face to face) 3 (9.6%) • Assessment/feedback 3 (9.6%) • Realization of Trainee/Opinions from Trainee 02 (6.4%) • Time management 01 (3.2%) • Reviewing Resident portfolio before meeting 01 (3.2%)

4. DISCUSSION

The current study was conducted to find the perceptions of mentees and mentors about the process of mentorship program and also mentees opinions on the qualities of mentors for the academic improvement at Qassim FMA. There are many educational institutes will implement the mentorship programs at their institute level in many advanced countries, where the resources and facilities are available to progress the professional life, advancement of career and social or psychological improvement.

In the present study, mean overall satisfaction and standard deviation about mentorship program was 7.5 ± 2.7 expressed by mentees. Mentors mean overall satisfaction about mentees in mentorship program was 7.8 ± 1.7 . On the whole, both the mentors and mentees overall satisfaction about the mentorship program is reasonably good (more than 75%).

A study conducted by Maria Ghawji, et al in Riyadh in the year 2017 and mentees expressed the satisfaction about mentors as best satisfaction and not revealed as percentage strength of satisfaction in their article. In this study, 60% of mentees mentioned as mentors are supportive. In their study also stated that the two important common suggestions were before commencement of a meeting, mentors should aware with assessment information for mentee exams, progress and along with appropriate faculty training [22]. In this perspective, in the current study mentors commented as mentor meeting is important and need modification to incorporate the needs of mentees exam preparation discussion, communication and updates. Even mentees suggested in the present study, during the mentor meeting to be discussed certain domains like exam preparation, learning, training and focussed discussion.

In the present study, nearly 78% of junior level mentees agreed perceptions about mentor

professional, helpful and respectful, whereas among the senior level mentees perceptions for the same was 85%. Another important domain of professional development during the mentor meeting, about 48.1% of junior level mentees agreed opinion, almost same percentage (45.4%) of senior level mentees agreed for the same variable. In the forthcoming mentorship programs, need to focus little more about the improvement of professional domain of the mentees to be addressed by creating awareness to all the mentors. This could be due to first mentorship batch and there will be some accommodative and training process hurdles while conducting mentorship meeting at FMA from both point of view.

A study conducted by Khojah A et al at King Abdulaziz University in Jeddah revealed that 93% of the mentees opined that the mentor program is useful for the mentees personal and professional development and also stated that mentors are the back bone of any successful mentoring program [23]. The higher percentage can be attributed in that the study conducted at English Language Institute (ELI) at King Abdulaziz University, year of starting mentorship program, level of mentors training in mentorship program and there could be some sort of differences between the medical post graduate students versus undergraduate students and their faculty mentors.

In Canada in the year 2016 among family physicians of first 5 years practice, conducted a study by Hernandez-Lee J et al revealed that 90% career coaching and support. About 74% mentioned as a personal and professional success. 73% networking opportunities [24]. Another research conducted in Saudi Arabia among Computer science teachers in relation to professional development and denoted those teachers transmits new ideas, innovations and creative teaching methods that impact the students to develop their professional skills through mentoring activities [25]. Also, mentoring and professional development strategies mentioned by Jessica Bejarano in the year 2022 in her review of article [26].

For the variable of opportunity to discuss social or psychological problem during mentor meeting, 66.7% of junior level mentees agreed and about 54.6% senior level mentees agreed for the same variable. A study conducted in Case Western Reserve University, United States of America in their mentorship programs, one author

recognized the importance of social issues in science and shared experience in their mentorship program with excited and rewarded way as provided good mentorship will bring the underprivileged students can shine to the successful graduates irrespective of socioeconomic background, ethnicity and race [27].

In the present study, mentor provided constructive feedback, about 63% of junior level mentees gave agreed opinion and almost same percentage (66.7%) of senior level mentees expressed as agreed opinion for the variable of constructive feedback. A study conducted by UCL Medical school in London about the Medical students mentoring programs identified certain facts such as mentors should receive training for the role and delivery of effective feedback. Constructive feedback will help in making the decisions and also helpful in progress of learning [28].

In the current study, personal communication (85%), followed by WhatsApp communication was 75% among the mentees and to arrange and complete their mentor meeting. Almost similar observation was observed among the mentors as personal communication 93.5% and next to other channel as WhatsApp and phone communication as 71%. A study conducted in Germany by Meinel FG et al published their research in 2011 stated that the most common communication between mentee and mentor was personal meetings and also mentioned about 91% by e mail communication between them, followed by telephonic communication [29]. As study published in 2011, those time other electronic media like WhatsApp, telegram and other social media is not that much popular.

For the context of digital communication, nowadays its use increased among the medical and nonmedical mentees as well as mentors. However, there is digital communication with quality of mentorship, less research conducted as per the google scholar information. One study conducted as a systematic review from 258 mentors and 147 mentoring program staff in the USA and Canada shown as formal mentorship programs and associations between mentor perceptions about digital media. This study stated as impact of digital media use on mentor program quality and duration perceived as neutral or positive. Also, mentioned as future research is required to substantiate the digital

media and its impact on mentorship program [30].

In relation to the mentorship program communication, a study done by McGuire CM et al about online implementation of mentorship program for the family physicians and observed in Sub-Saharan Africa 11 countries and 3 continents to facilitate in distance mentorship program for their trainees during the COVID-19 period. Later, most of the places of the world adopted this online mentorship programs during COVID-19 pandemic to curb the transmission of the disease as a preventive measure [31]. Similar observation and supported the same evidence by the other two studies conducted Harvard Medical school, Boston [32] and also study done by African Neurosurgeons [33] in the 2019 mentioned in their study as post-graduation centres as online mentorship. This is evident and relevant during the period of COVID-19 pandemic, pushing online post-graduation education including mentorship increased never before.

In our study, nearly half of the junior level (48.1%) mentees gave agreed opinion on mentor meeting useful for improving quality, whereas among the senior level agreed opinion was 63.6%. On the whole, some focus is required to improve the quality of the mentorship program at FMA to achieve mentee required competencies in relation to mentorship program. In the report of Okereke, year 2000 mentioned that the mentoring is very important and under researched area in medical training [19]. Other study by Maddix T stated that the certain qualities of the mentors borne by the live experience, sense of working nature, building good teams and best integrity tendency [7]. Some of the limitations in our study is small sample, self-administered questionnaire as there is a chance of understanding and interpretation of some questions. Need further studies to substantiate our study results and also generalisability of the findings.

5. CONCLUSIONS

Based on the present study results, overall satisfaction about mentorship program is good. But, need to focus on certain domains like professional development, social and psychological problems of mentees to be addressed during mentor meeting. In addition to that, close to two thirds of the mentees expressed their views about clear objectives,

strengths and weaknesses about the previous rotation evaluation reports and addressing how to overcome those issues during the mentor meetings. Mentors suggested that current mentorship program need some change, while conducting the mentorship session with mentees; mentees need proper plan, orientation, checklist is required before scheduling the mentor meeting.

ETHICAL APPROVAL AND CONSENT

Ethical approval was received from the Regional Ethics Committee, Qassim, with approval number 607-445836. Informed consent was taken before circulation of the Google link to the participant. Confidentiality of the participant information was maintained and personal identifiers were not obtained.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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