

Original Research Article

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

Abstract

Background: Health care institutes started mentorship programs for the professional and social development of trainees and junior health care staff. Objective of the present study was to find the perceptions of mentees and mentors about process of 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 during September 2022. Data was collected using semi-structures questionnaire. Data analyzed with SPSS.

Results: A total of 60 mentees and 31 mentors participated. Majority of mentees opined that mean number mentor meetings was 2.76 per year. Mentees perceptions about clear objectives in their meeting was 71.7% and also same percentage (70%) mentioned as opportunity to discuss about 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 mentorship program was 7.5 ± 2.72 and mentors overall satisfaction reported as 7.8 ± 1.7 out of 10.

Conclusions: Based on the study findings, mentors and mentees were overall satisfied with mentorship program. But, Mentees perceptions about social or psychological problem and professional development agreed opinion was nearly fifty percent only. On the other hand,

Comment [DC1]: The objective of

Comment [DC2]: The process of

Comment [DC3]: the mentorship program

Comment [DC4]: cross-sectional

Comment [DC5]: in September

Comment [DC6]: a semi-structured questionnaire or semi-structured questionnaires

Comment [DC7]: was analyzed

Comment [DC8]: The majority of

Comment [DC9]: the mean number of

Comment [DC10]: Mentees' perceptions

Comment [DC11]: comma

Comment [DC12]: the same percentage (remove "also" because it is redundant).

Comment [DC13]: Seventy-seven

Comment [DC14]: mentees'

Comment [DC15]: the mentorship program

Comment [DC16]: When a coordinating conjunction, such as "and," is used to connect two independent clauses, a comma is needed in front of it.

Comment [DC17]: mentors'

Comment [DC18]: was reported

Comment [DC19]: the mentorship program

Comment [DC20]: Mentees'

Comment [DC21]: problems

Comment [DC22]: What do you mean?

mentors had concern related to keenness of mentees for the mentorship meeting. There is need to focus on these domains in the forthcoming mentorship programs.

Comment [DC23]: concerns

Comment [DC24]: The keenness

Comment [DC25]: There is a need

Key words: Mentees, Mentors, Family Medicine, Mentorship program, Perceptions, Saudi Arabia.

UNDER PEER REVIEW

Introduction:

The importance of mentorship within health care training is well recognized. Mentorship enhances workforce performance, engagement, promote 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].

Comment [DC26]: and promotes

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 of 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 educationdevelopment[4].

Comment [DC27]: in an advanced position

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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 those who exhibit admirable personal qualities, act as a career guide, and display 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].

Comment [DC29]: those who . . . act as career guides, and display a commitment to their. . .

Mentorship programs are designed to meet their mentor and mentee regularly at periodical 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, these varying definitions of mentorship have led to disparate views regarding the true benefit of this relationship[6,16].

Comment [DC30]: How do programs meet their mentor and mentee regularly? What do you mean?

Comment [DC31]: comma

Comment [DC32]: You are not talking about definitions of mentorship in this paragraph. What is the topic of this paragraph?

Some sources have cited drawbacks to mentorship[17]. In FM, there is even less of an understanding regarding the concept of mentorship. For this reason, it had been commonplace 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].

Comment [DC33]: What is the main idea of this paragraph? Are you talking about the drawbacks of mentorship or lack of understanding of mentorship in FM? Please improve the logical flow of this paragraph.

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

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training and ultimately affects independent practice[11]. Therefore, the impact of mentorship on professional development, particularly in FM, remains unclear.

Generally, at our FM residency program, selection of mentor 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 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.

Materials and Methods:

Study setting:

A Cross sectional study was conducted among mentees and mentors working at different primary health care centres attached to Family Medicine Academy, Qassim.

Sampling:

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

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 inclusion of last year graduated persons in this study highlighted that they might have completed mentorship recent past and moreover they are free to share their views as they completed the program.

All the mentors working at FMA and involved in Mentorship program

Comment [DC35]: the selection of mentors

Comment [DC36]: Place the comma before "such as," not after.

Comment [DC37]: the annual review

Comment [DC38]: Is this a new paragraph?

Comment [DC39]: mentees' and mentors'

Comment [DC40]: What was your research question(s) and hypotheses?

Comment [DC41]: cross-sectional

Comment [DC42]: Please be precise. How many different centers?

Comment [DC43]: the study

Comment [DC44]: the mentorship

Comment [DC45]: in the last two years

Comment [DC46]: the mentorship program (Mentorship is not a proper noun; therefore, it should not be capitalized).

Comment [DC47]: I assume this means Family Medicine Academy. Please introduce this acronym. The first time you use the term, put the acronym in parentheses after the full term.

Comment [DC48]: Please this sentence for clarity and grammatical errors.

Comment [DC49]: the mentorship program

Exclusion Criteria:

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

Data collection Tool:

A questionnaire was developed based on the previous studies conducted at different institute settings. With the help of trained faculty and all co-authors arranged a meeting for the questionnaire tool development. Same authors conducted meetings on several occasions to build the questionnaire based on the objectives mentioned in study.

Data Collection Procedure:

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.

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

Certain 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.

Ethical Considerations:

Comment [DC50]: in... settings

Comment [DC51]: Incomplete sentence.

Comment [DC52]: The same authors

Comment [DC53]: Please be precise in scientific writing. How many occasions?

Comment [DC54]: the study

Comment [DC55]: Please describe the instrument. Did you test the instrument for face and content validity? Did you pilot the instrument before use? How do you know if your instrument measures what you are intended to measure?

Comment [DC56]: This information is about the instrument, not the procedure.

Comment [DC57]: The

Comment [DC58]: comma

Comment [DC59]: Do you have two different questionnaires? Please describe them clearly in the previous section.

Comment [DC60]: Please be precise. What do you mean by "certain questions"?

Comment [DC61]: five-point

Comment [DC62]: You did not describe the data collection procedure in this section. Please describe how the data were collected? Did you distribute the surveys to the participants and have them fill it out? When did that happen? How much time did you allow the to answer the questions? How did you collect the surveys?

Ethical approval received from the Regional Ethics Committee, Qassim with approval number 607-44-5836. Informed consent was taken before circulation of the google link to the participant. Confidentiality of the participant information maintained and personal identifiers were not obtained.

Comment [DC63]: Was received from

Comment [DC64]: comma

Comment [DC65]: Google s a proper noun.

Comment [DC66]: Please mention this information in the "data collection procedure" section.

Comment [DC67]: was maintained, and personal. . .

Statistical Analysis:

Data was initially transferred to Micro soft 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 satisfaction level 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 see the association of overall satisfaction score with socio-demographic characteristics of the mentees. A probability (P) value of ≤ 0.05 was considered as statistically significant.

Comment [DC68]: One word

Comment [DC69]: Google

Comment [DC70]: Satisfaction level is not a continuous variable. It is ordinal.

Comment [DC71]: It should be hyphenated.

Comment [DC72]: Lower cap p (p-value)

Results:

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

Comment [DC73]: Please be precise. What do you mean by "periodic reminders"? How often did you remind the participants?

Comment [DC74]: Do you mean study sample?

Comment [DC75]: Grammatical error. "Similar way" could not distribute the questionnaire. What do you want to say?

Mean mentee age and standard deviation in the study population reported as 29.08 ± 2.410 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.

Comment [DC76]: Please be consistent with the format. How many decimal points do you want to capture?

Nearly 85% mentees gave opinion as allowed mentor on their own interest and majority (63.3%) opined that their mentor should be consultant. Training experience among

Comment [DC77]: What do you mean?

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 with each of the mentors. The mentors mean duration of meeting expressed as about 25 minutes per session. (Table 1)

Linear regression analysis was done with overall satisfaction of mentorship program with mentees age, opinion on the suitable number of mentor meetings and duration of the mentor meetings and there was no significant association was observed between them ($P > 0.05$).

Comment [DC78]: See my earlier comment on the consistency of formats.

Comment [DC79]: Median of what?

Comment [DC80]: Grammatical errors

Comment [DC81]: Linear regression analysis is used to predict the value of a variable based on the value of another variable. It is not a test for association.

Comment [DC82]: the overall satisfaction of the mentorship program

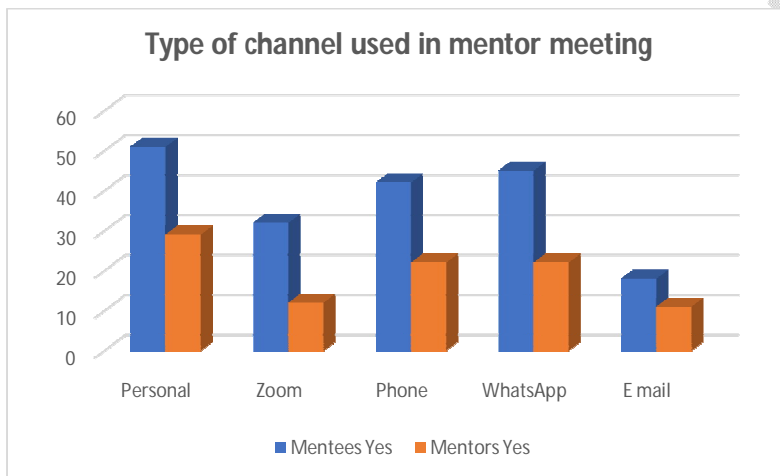
Comment [DC83]: mentee's age

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 \pm SD (n-60 & n-31)	29.08 ± 2.41	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%) \pm ??
Training experience of Mentors (years) \pm SD		7.5 ± 6.8
Mean Mentorship experience (years) \pm 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 ± 10.64	25.7 ± 13.6 ?
Suitable number of mentor meetings (n-50)	2.76 ± 1.57	

Figure: 1 - Type of channel used to complete the mentor meeting in the study.

Comment [DC84]: Label the y-axis.



The figure 1 showed as most common method of channel used as 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 was 93.5% and next to other channel as WhatsApp and phone communication was 71% each.

Comment [DC85]: Figure 1

Comment [DC86]: types

Comment [DC87]: Rewrite this sentence for clarity.

The mean overall satisfaction and standard deviation about mentorship program was 7.5 ± 2.72 expressed by mentees. Mentors mean overall satisfaction in mentorship program observed as 7.8 ± 1.7 .

Comment [DC88]: Is this a new paragraph?

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	$(\chi^2-1.298, 2df, P-0.523)$
Junior	13 (48.1%)	4 (14.8%)	10 (37%)	
Senior	21 (63.6%)	6 (18.2%)	6 (18.2%)	
Level	Objectives of Mentor meeting clear			$(\chi^2-3.30, 2df, P-0.220)$
Junior	21 (77.8%)	2 (7.4%)	4 (14.8%)	
Senior	22 (66.7%)	8 (24.2%)	3 (9.1%)	
Level	Mentor meeting useful for improving quality			$(\chi^2-1.467, 2df, P-0.480)$
Junior	13 (48.1%)	9 (33.3%)	5 (18.5%)	
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 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: 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			$(\chi^2-0.119, 2df, P-$

Junior	17 (63%)	6 (22.2%)	4 (14.8%)	0.942
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 ($<50\%$)
	40 (66.7%)	11 (18.3%)		9 (15%)

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.

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 - 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 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.

Comment [DC89]: Where is the regression analysis?

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 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 – 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%)

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.

Discussion:

The present study conducted with an objective is 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 Family Medicine academy. 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.

Comment [DC90]: Grammatical error

Comment [DC91]: FMA

In the present study, mean overall satisfaction and standard deviation about mentorship program was 7.5 ± 2.72 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 Harward Medical school, Bostan [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.

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.

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