

## Female Medical Students' Relationship Styles And Their Intended Primary Care and Non-Primary Care Postgraduate Specialty Preferences

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### ABSTRACT

**Objective:** To compare the predominant relationship/attachment styles of final year female medical students of a Pakistani medical college with their intended primary care and non-primary care post-graduate speciality preferences.

**Study Design:** Cross-sectional comparative study.

**Place and Duration of Study:** Sir Syed College of Medical Sciences for Girls, Karachi, from Feb to Apr 2019.

**Methodology:** Final year MBBS students were included in the study. Students were asked to complete a validated relationship scales questionnaire to determine the dominant relationship/attachment style. Students were also asked to identify their intended first choice for post-graduate specialization from a list of 28 primary care and non-primary care post-graduate specialities.

**Results:** Out of 113 female students, 48 (43%) were found to have a predominantly dismissing relationship style (among four variants of relationship styles). Out of 95 (84%) students opted for a non-primary care speciality for pursuing post-graduation, out of which 37 (33%) students chose Obstetrics and Gynaecology. Comparison of participant's relationship styles with post-graduate speciality showed no significant difference ( $p$ -value=0.40).

**Conclusion:** Medical students should be provided adequate and timely exposure to various specialities available for post-graduation (primary and non-primary care specialities) and should be guided appropriately to help them make informed career choices.

**Keywords:** Attachment theory, Dismissing style, Fearful style, Insecure style, Non-primary care, Pre-occupied style, Primary care, Secure style.

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### INTRODUCTION

Career choice in medicine can be impacted by an individual's personality traits, including level of comfort in relationships.<sup>1</sup> These interpersonal relationships are dependent upon the attachment tendencies explained by attachment theory.<sup>1-3</sup> Four specific patterns of interpersonal relationship styles have been derived from attachment theory. All the individuals are characterized predominantly by one of those four styles: one is "secure" and the other three are insecure styles; "fearful (cautious)", "preoccupied (support-seeking)" and "dismissing (self-reliant)".<sup>1-4</sup> Bartholomew has proposed that these individual attachment patterns may have associations with interactions in interpersonal relationships and this includes the patient-provider relationship.<sup>5,6</sup> Adults with a predominantly secure relationship style generally have a favourable view of oneself and others. Adults with predominantly insecure relationship styles have either a negative view of oneself or other or both.<sup>1,2</sup>

The dearth of adequate and timely availability of information to medical students regarding the choice of speciality for postgraduate training poses great difficulty for specialist-training aspirants in finding their way through their careers. The indecisiveness brings along with it a great degree of stress. Even if they somehow manage to make an uninformed decision and enter postgraduate training, they eventually regret their choice, ultimately leading to more significant physician burnout and decreased productivity or wasting time and resources in changing their training speciality altogether.<sup>7</sup>

Thus, a proactive approach is the need of the hour to develop ways for students to take a more objective look at how their styles, personality and skills would match the requirements of the variety of specialities available.<sup>7</sup>

Studies have shown that the assessment of relationship style can help future doctors/physicians understand how well suited they are for primary care versus non-primary care specialities based on their interest and level of comfort with establishing long-term patient relationships and henceforth, guiding

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them about career choice accordingly.<sup>1,2,8,9</sup> Medical students rating themselves as having a predominantly secure relationship style often opt for primary care disciplines that are typically characterized by more stable, long-term patient-provider relationships.<sup>1,2,8</sup> In contrast, students rating themselves as having a predominantly self-reliant or cautious relationship style are more likely to choose non-primary care disciplines as these specialities tend to have limited patient encounters.<sup>1,2,9</sup>

In Pakistan, the majority of undergraduate medical students are females.<sup>10</sup> A changing trend has been observed that students pursuing post-graduation are also predominantly females. Therefore, it is important to explore and compare female students' predominant relationship (attachment) styles and their preferred choices for postgraduate specialization at the undergraduate level. The purpose of this study was to determine the predominant relationship (attachment) styles of final year female medical students of a Pakistani Medical college using the relationship scales questionnaire.

## METHODOLOGY

This cross-sectional comparative study was conducted after approval from the Institutional Review Board (Ref:/SSCMSLET/2019/013) in Feb 2019 at Sir Syed College of Medical Sciences for Girls. Sample size was calculated by using OpenEpi sample size calculator.<sup>11</sup> Taking statistics for support-seeking (pre-occupied) style as 11.8%,<sup>2</sup> margin of error as 6% and 95% confidence level, the calculated sample size came out as 112. The study sample was selected using the non-probability consecutive sampling technique after obtaining written informed consent.

**Inclusion Criteria:** Final year MBBS students were included in the study.

**Exclusion Criteria:** Non-consenting students were excluded.

The questionnaire was distributed to the final year MBBS students. They were asked to complete an internationally well-known, validated questionnaire known as the relationship scales questionnaire (RSQ) 12 to determine the dominant relationship/attachment styles out of subscales of the RSQ. Four-category model subscales were; secure, dismissing (self-reliant), preoccupied (support-seeking), and fearful (cautious).<sup>12</sup> The questionnaire also included variables like age, marital and hostility/non-hostility status. Additionally, students were also provided with a list of 28

primary care and non-primary care postgraduate specialities from which the intended first choice of speciality for postgraduate specialization was required to be chosen. The final questionnaire was further verified by pilot testing on thirty students.

The collected questionnaires were analyzed in two parts. For the first part, 17 items from the original 30 short statements of the RSQ were used to create continuous subscales of attachment style categories as defined by Bartholomew (1994).<sup>12</sup> The items consisted of 5-point Likert scales, which measured the extent to which each item statement represented the respondent's feelings about close personal relationships. Five statements each contributed to the secure and dismissing (self-reliant) attachment patterns and four statements each contributed to the fearful (cautious) and preoccupied (support-seeking) attachment patterns. Scores for each attachment pattern were derived by taking the mean of the four or five items representing each attachment prototype. For the second part of the questionnaire comprising 28 postgraduate specialities, three specialities; family medicine, paediatrics, and general/internal medicine, were categorized as primary care specialities.<sup>2,13-16</sup> Rest of the 25 specialities were classified as non-primary care specialities. Categorization of the specialities into the two groups was carried out as per literature review and expert validation. Expert validation was performed by nine content and subject experts.

Data collected was entered by the double-entry method for removing missing values and checking the error rate, which was <0.02%. The cleaning and coding of the data were done prior to analysis using Statistical Package for Social Sciences (SPSS) version 23.0. Frequencies and percentages were calculated for the type of relationship style and speciality choice (primary/non-primary care). Comparison of participant's relationship styles with postgraduate speciality was analyzed by applying chi-square test. The *p*-value of  $\leq 0.05$  was considered statistically significant.

## RESULTS

Out of 153 students, only 113 participated in the study. The response rate of the students was 74%. The mean age of medical students was  $23.9 \pm 4.39$  years. Descriptive statistics of postgraduate speciality group chosen by relationship (attachment) style groups were shown in Table-I.

Comparison of participant's relationship styles with the chosen postgraduate speciality showed no significant difference with the *p*-value of 0.4.

Postgraduate speciality choices were orderly ranked among the various relationship style groups shown in Table-II.

**Table-I: Post-graduate specialty group choice by relationship (attachment) style groups**

Relationship (Attachment) Style (n=113)		Type of Care		p-value
		Primary	Non-Primary	
Secure	23 (20%)	6 (33%)	17 (18%)	0.407
Fearful (Cautious)	31 (27%)	5 (28%)	26 (27%)	
Preoccupied (Support-seeking)	11 (10%)	2 (11%)	9 (10%)	
Dismissing (Self-reliant)	48 (43%)	5 (28%)	43 (45%)	

A study conducted by Ciechanowski *et al*, in Seattle, Washington, showed that students' interpersonal relationship styles based on attachment theory affect their preferred speciality choice. The study reported that 56% of students were found to have a secure relationship style.<sup>2</sup> It was reported that the students characterized by a secure style preferred primary care (61%) over non-primary care, whereas the students having a fearful (cautious) or dismissing (self-reliant) style inclined non-primary care specialities.<sup>13,14</sup> The results of our study, in contrast, showed that the majority (43%) of the students had a predominantly dismissing (self-reliant) relationship style. It is found in the literature that students with dismissing relationship style are generally less comfortable in trusting others and develop early strategies to be self-sufficient

**Table-II: Rank-ordered post-graduate specialty preferences among the various relationship style groups.**

Specialty	Secure 23 (20%)	Fearful (Cautious) 31 (27%)	Preoccupied (Support-seeking), 11 (10%)	Dismissing (Self-reliant) 48 (43%)
Obs/Gynaecology	7	10	4	16
Paediatrics	4	4	2	4
General Surgery	3	4	1	2
Neurosurgery	-	4	-	5
Dermatology	-	1	1	6
Anaesthesiology	-	1	-	3
Gastroenterology	3	-	-	1
Neurology	-	1	-	3
Diagnostic Radiology	-	1	-	2
Cardiology	1	-	2	-
Cardiovascular Surgery	1	1	-	-
ENT	-	1	-	1
Family Medicine	1	-	-	1
General Medicine	1	1	-	-
Nephrology	-	1	1	-
Emergency Medicine	1	-	-	1
Medical Oncology	-	-	-	1
Pathology	1	-	-	-
Plastic Surgery	-	-	-	1
Psychiatry	-	1	-	-
Pulmonology	-	-	-	1

**DISCUSSION**

According to the results of our study, among the four relationship styles, dismissing (self-reliant) style came out as the most dominant, followed by fearful (cautious), secure and preoccupied (support-seeking). Students from each of the predominant attachment categories opted for a non-primary care speciality (84%) for pursuing post-graduation, among which obstetrics and gynaecology (33%) was found to be the most preferred choice followed by paediatrics (12%) and general surgery (9%).

as a result of possible childhood situations wherein their needs were improperly met.<sup>15,16,17</sup>

Ciechanowski *et al*, conducted a follow-up study in which relationship styles based on attachment theory were focused. One of the inferences from that study was found to be similar to our result that majority of students having a dismissing (self-reliant) relationship style selected non-primary care speciality for post-graduation.<sup>1</sup>

A study conducted by Huda *et al* on career preferences of final year medical students of a private medical university of Pakistan reported internal medi-

cine as the first choice for women, followed by paediatrics and general surgery.<sup>18</sup> Whereas in our study, females belonging to all four relationship style groups selected obstetrics & gynaecology as their preferred speciality for post-graduation. In contrast to our result, another study conducted on career-related choices of medical students at a medical college of Pakistan revealed that surgery and paediatrics were among the most popular post-graduate speciality choices. However, the same study also highlighted basic medical sciences and family medicine as the least opted specialities for post-graduation.<sup>19</sup> This finding, however, is consistent with our study results. Another possibility, especially about the Pakistani context, may be the inadequate timely exposure of aspiring post-graduates to various fields of specialization, particularly family medicine and basic medical sciences.<sup>20</sup>

Several studies have highlighted the importance of offering adequate information to medical students to help them make educated career choices in order to prevent eventual problems of residents/physicians' stress/burnout, physician career dissatisfaction and physicians changing residencies/making major career speciality changes.<sup>7,21</sup> Thus it is desired that policymakers undertake major steps for timely acquainting and facilitating medical students to make a suitable career choice.<sup>22</sup> It is also pertinent to focus upon the neglected areas of care by encouraging students to consider primary care specialities for post-graduation.<sup>23</sup>

Compared to their post-graduate speciality choices, students' relationship styles did not result in any significant difference. Dismissing (or self-reliant) relationship style is the predominant attachment variant among female final year medical students of a private medical college. Obstetrics and gynaecology (non-primary care speciality) is the most preferred post-graduate specialization, followed by paediatrics and general surgery. Unfortunately, very few students opt for general medicine and family medicine (primary care specialities). Policymakers should focus upon strategies for medical students' adequate and timely exposure to various specialities available for post-graduation (primary and non-primary care specialities) and guiding them appropriately to help them make informed career choices.

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#### LIMITATIONS OF STUDY

The limitations of our study were the relatively small sample size and data collection from a single private medical college serving to the higher socioeconomic group. Additionally, other important factors that influence speciality choices, such as prestige, monetary rewards, lifestyle and intellectual challenge, were not considered.

#### CONCLUSION

Medical students should be provided adequate and timely exposure to various specialities available for post-graduation (primary and non-primary care specialities) and should be guided appropriately to help them make informed career choices.

**Conflict of Interest:** None.

#### Authors' Contribution

SIM: Research idea, research design, data collection, data analysis, writing submission, SHS: Research idea, research design, data analysis.

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